

Fig. 1. Genes down regulated on day 1.

geneID	geneName
10	androgen binding protein
23	plasma kallikrein (rPK) Lim-2; embryonic motor neuron topographic organizer, HOMEobox PROTEIN LIM-2 (LIM/HOMEODOMAIN
62	PROTEIN LHX5).
	DCC; netrin receptor; immunoglobulin gene superfamily
95	member; former tumor suppressor protein candidate
122	N-myc proto-oncogene protein
	M-phase inducer phosphatase 2 (MPI2); cell division
161	control protein 25 B (CDC25B) von ebner's gland protein 2; VEG protein 2; VEGP2 + von ebner's gland protein 1; VEG protein 1; VEGP1;
177	VEGP synaptobrevin 1 (SYB1); vesicle-associated membrane
210	protein 1 (VAMP1) 3-methylcholanthrene-inducible cytochrome P450
211	(P450MC); cytochrome P450 IA1 (CYPIA1) cytochrome P450 VII (CYP7); cholesterol 7-alpha-
225	monooxygenase; cholesterol 7-alpha-hydroxylase
227	cyclic nucleotide-activated channel, olfactory
239	cytochrome P450 2E1 (CYP2E1); P450-J; P450RLM6
245	high affinity L-proline transporter neuronal acetylcholine receptor protein alpha-3 chain
282	precursor
284	sodium channel I voltage-dependent L-type calcium channel alpha 1C subunit (CACNA1); cardiac muscle L-type calcium channel alpha 1 polypeptide isoform 1 (CCHL1A1); rat
285	brain class C (RBC); CACH2; CACN2
290	ATPase, hydrogen-potassium, alpha 2a subunit sodium channel, amiloride sensitive, alpha subunit;
297	SCNEA; alpha NACH; SCNN1A; RENAC;
298	cardiac specific sodium channel alpha subunit
299	potassium channel protein CDRK neuronal acetylcholine receptor protein alpha 5 subunit
310	precursor (CHRNA5; ACRA5)
311	sodium channel SHRSPHD, gamma subunit, epithelial
312	sodium channel protein 6 (SCP6) renal organic anion transporter (ROAT1) + multispecific
323	organic anion transporter (OAT1) neuronal acetylcholine receptor protein alpha 6 subunit
324	precursor (CHRNA6; ACRA6)
325	purinergic receptor P2X3, ligand-gated ion channel
327	calcium channel, alpha 1 beta
328	sodium channel, beta 1 subunit neuronal acetylcholine receptor protein alpha 7 subunit
338	precursor (CHRNA7; ACRA7)
	339 neuronal nicotinic acetylcholine receptor alpha 2 subunit

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proton gated cation channel drasic; sensory neuron
340 specific
channel-inducing factor precursor (CHIF); corticosteroid-
347 induced protein
348 MYELIN BASIC PROTEIN S (MBP S)
351 organic cation transporter 2 (OCT2)
354 ASIC1 proton gated cation channel
367 glycine receptor alpha 3 subunit precursor (GLRA3)
voltage-gated K⁺ channel protein; RK5; potassium
368 channel protein
voltage-activated calcium channel alpha-1 subunit (RBE-II); nickel-sensitive T-type calcium channel alpha-1
381 subunit
inward rectifier potassium channel subfamily J member 2
382 (KCNJ2); RBL-IRK1
eek proto-oncogene, protein tyrosine kinase, eph/elk-
589 related
590 prostaglandin D2 receptor
activin receptor type I precursor (ACVR1; ACTR1);
serine/threonine-protein kinase receptor R1 (SKR1); TGF-
591 B superfamily receptor type I (TSR-I); ACVRLK2
592 calcitonin receptor precursor (CT-R); C1A/C1B
prostaglandin E2 receptor EP2 subtype (PGE receptor
593 EP2 subtype; PTGER2); prostanoid EP2 receptor
NEUREXIN I-BETA PRECURSOR,Non-processed
neurexin I-beta Synaptic cell surface proteins +
NEUREXIN I-ALPHA PRECURSOR,Non-processed
600 neurexin I-alpha Synaptic cell surface proteins
gastrin-releasing peptide precursor (GRP); neuromedin
602 C
serotonin receptor; 5-hydroxytryptamine 6 receptor (5-HT-
6); ST-B17; possesses high affinity for tricyclic
605 psychotropic drugs
606 platelet activating factor receptor
alpha 2B adrenergic receptor (ADRA2B); alpha 2B
608 adrenoceptor
VASOACTIVE INTESTINAL POLYPEPTIDE
RECEPTOR 2 PRECURSOR (VIP-R-2) (PITUITARY
ADENYLATE CYCLASE ACTIVATING POLYPEPTIDE
TYPE III RECEPTOR) (PACAP TYPE III RECEPTOR)
610 (PACAP-R-3).
transforming growth factor beta 3 (TGF-beta3);
616 antiproliferative growth factor
620 vasopressin V1b receptor
621 prostaglandin E2 receptor EP4 subtype
alpha 2C adrenergic receptor (ADRA2C); alpha 2C
622 adrenoceptor
623 vasopressin/arginine receptor, V1a
634 prostaglandin F2 alpha receptor
635 growth hormone secretagogue receptor 1 (GHSR)
636 cholecystokinin receptor

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NMDAR2A N-METHYL-D-ASPARTATE RECEPTOR
641 SUBUNIT
P2U PURINOCEPTOR 1 (ATP RECEPTOR) (P2U1)
643 (PURINERGIC RECEPTOR).
646 estrogen receptor beta (ER-beta); ESR2; NR3A2
647 kappa-type opioid receptor (KOR-1)
648 lutropin-choriogonadotrophic hormone receptor
649 beta 1 adrenergic receptor (ADRB1R)
650 5-hydroxytryptamine (serotonin) receptor 1B; 5-HT1B
651 adrenergic receptor, beta 2
655 muscarinic acetylcholine receptor M3 (MACHR)
660 B1 bradikinin receptor
mu opioid receptor (MUOR1); mu-type opioid receptor
661 (MOR-1); opioid receptor B
662 serotonin 5HT2 receptor
664 somatostatin receptor 2
692 melatonin receptor
704 somatostatin receptor
707 galanin receptor 1
720 neuromedin B receptor
725 transmembrane receptor UNC5H1.
748 pancreatic polypeptide receptor PP1
789 interleukin-2 (IL-2)
857 somatostatin
969 luteinizing hormone, alpha
1169 mast cell protease 1 precursor (RMCP-1)

Fig. 2. Genes upregulated on day 3.

geneID	geneName
50	microglobulin; beta-2-microglobulin + prostaglandin receptor F2a
70	glutathione S-transferase Yb subunit; GST subunit 4 mu (GSTM2)
142	vascular cell adhesion protein 1 precursor (V-CAM 1)
316	gamma-aminobutyric acid (GABA) transporter 2
672	VGF8A protein precursor
860	Transforming growth factor beta (TGF-beta) masking protein large subunit
869	erythropoietin precursor (EPO)
972	protein arginine N-methyltransferase 1

Fig. 3. Genes down regulated on day 3

geneID	geneName
24	prostatic secretory protein probasin (M-40) E-selectin precursor; endothelial leukocyte adhesion molecule 1 (ELAM-1); leukocyte-endothelial cell
30	adhesion molecule 2 (LECAM2); CD62E Protein kinase C-binding protein beta15; RING-
48	domain containing kidney band 3 anion exchange protein; SLC4A1;
57	AE1 L-selectin precursor; lymph node homing receptor; leukocyte adhesion molecule-1 (LAM-1); LY-22; lymphocyte surface MEL-14 antigen; leukocyte-endothelial cell adhesion molecule 1 (LECAM1);
58	CD62L 80 Wilms' tumor protein (WT1); tumor suppressor
88	CD28, T-cell surface antigen
96	c-fgr proto-oncogene
101	CD3, gamma chain
106	cathepsin E
150	S-myc proto-oncogene protein; myc-related G protein-activated inward rectifier potassium channel 4 (GIRK4); inward rectifier potassium channel subfamily J member 5 (KCNJ5); heart KATP channel; KATP-1; cardiac inward rectifier (CIR);
215	KIR3.4
268	fructose (glucose) transporter
312	sodium channel protein 6 (SCP6)
328	sodium channel, beta 1 subunit sodium-hydrogen exchange protein-isoform 2 (NHE-2)
329	PMCA; ATP2B2; calcium-transporting ATPase plasma membrane (brain isoform 2; EC 3.6.1.38);
331	calcium pump
332	ATPase, sodium/potassium, gamma subunit G protein-activated inward rectifier potassium channel 1 (GIRK1); inward rectifier potassium channel subfamily J member 3 (KCNJ3); KGA;
333	KGB1; KIR3.1 proton gated cation channel drasic; sensory neuron
340	specific
342	sodium channel 2, brain
346	ATPase, copper-transporting, Menkes protein channel-inducing factor precursor (CHIF);
347	corticosteroid-induced protein
350	synaptotagmin II
458	carbonic anhydrase 4
592	calcitonin receptor precursor (CT-R); C1A/C1B
637	vasopressin V2 receptor
650	5-hydroxytryptamine (serotonin) receptor 1B; 5-HT1B

Fig. 3. Genes down regulated on day 3

gamma-aminobutyric acid receptor alpha 4 subunit
682 precursor (GABA(A) receptor; GABRA4)
vitamin D3 receptor (VDR); 1,25-dihydroxyvitamin D-
694 3 receptor; NR1I1
697 muscarinic acetylcholine receptor M5 (CHRM5)
704 somatostatin receptor
707 galanin receptor 1
granulocyte-macrophage colony-stimulating factor
728 (GM-CSF); colony- stimulating factor (CSF)
758 guanylyl cyclase (membrane form)
760 parathyroid hormone receptor PTH2
762 galanin receptor 2
777 5-hydroxytryptamine (serotonin) receptor 2B
guanine nucleotide-binding protein G(I)/G(S)/G(O)
937 gamma-7 subunit (GNG7; GNGT7)
983 adenylyl cyclase 4
1028 protein kinase C-binding protein nel homolog 1
1080 phospholipase C beta 3 (PLC-beta 3)
1085 tissue-type plasminogen activator (t-PA)
NVP; neural visinin-like Ca²⁺-binding protein ,
VISININ-LIKE PROTEIN 1 (VILIP-1) (NEURAL
VISININ-LIKE PROTEIN 1) (NVL-1) (NVP-1) (21 KD
1165 CABP).

Fig. 4. Up-regulated genes on day 7

genelD	geneName
131	signal transducer & activator of transcription 3 (STAT3)
430	ceruloplasmin precursor (CP); ferroxidase
	clusterin (CLU); testosterone-repressed prostate
	message 2 (TRPM2); apolipoprotein J; sulfated
558	glycoprotein 2 (SGP2); dimeric acid glycoprotein (DAG)
	heparin-binding growth factor 2 precursor (HBGF2); basic
	fibroblast growth factor (BFGF); fibroblast growth factor 2
939	(FGF2); prostatropin

Fig. 5. Genes down regulated on day 7

geneID	geneName
17	T-cell receptor CD3 zeta subunit P-selectin precursor; granule membrane protein 140 (GMP-140); PADGEM; CD62P; leukocyte-endothelial cell adhesion molecule 3
44 (LECAM3)	
45	T-cell receptor gamma subunit
57	kidney band 3 anion exchange protein; SLC4A1; AE1 L-selectin precursor; lymph node homing receptor; leukocyte adhesion molecule-1 (LAM-1); LY-22; lymphocyte surface MEL-14 antigen; leukocyte-endothelial cell adhesion molecule 1
58 (LECAM1); CD62L	
71	myelin P0 protein precursor; MPZ MAL; T-lymphocyte maturation-associated protein; myelin protein
157 (MVP17)	
165	ErbB3 EGF receptor-related proto-oncogene; HER3 CD 30L receptor; lymphocyte activation antigen CD30; Ki-1
185	antigen; CD30 precursor
198	zinc transporter (ZnT-1) CCHB3; calcium channel (voltage-gated; DIHYDROPYRIDINE-
203	SENSITIVE L-TYPE, CALCIUM CHANNEL BETA-3 SUBUNIT.
207	water channel aquaporin 3 (AQP3) 3-methylcholanthrene-inducible cytochrome P450 (P450MC);
211	cytochrome P450 IA1 (CYPIA1)
220	sodium/potassium-transporting ATPase beta 1 subunit (ATP1B1)
254	glucose transporter 3 ATP-sensitive inward rectifier potassium subfamily J member 8 (KCNJ8); UKATP-1; ATP-sensitive inwardly rectifying K ⁺ channel
256	KIR6.1
265	RIM; Rab3 effector in synaptic-vesicle fusion
282	neuronal acetylcholine receptor protein alpha-3 chain precursor
283	purinergic receptor P2X5, ligand-gated ion channel
284	sodium channel I renal organic anion transporter (ROAT1) + multispecific organic
323	anion transporter (OAT1) neuronal acetylcholine receptor protein alpha 6 subunit precursor
324 (CHRNA6; ACRA6)	
328	sodium channel, beta 1 subunit
329	sodium-hydrogen exchange protein-isoform 2 (NHE-2) PMCA; ATP2B2; calcium-transporting ATPase plasma membrane
331	(brain isoform 2; EC 3.6.1.38); calcium pump
334	fibrinogen beta subunit (FGB)
352	sulfonylurea receptor (SUR)
367	glycine receptor alpha 3 subunit precursor (GLRA3)
379	multidrug resistance protein 2 (MDR2); P-glycoprotein (PGY2)
383	potassium channel, voltage gated, KV3.4; RAW3; KCNC4
386	sodium/chloride cotransporter, thiazide sensitive synaptosomal associated protein 25; SNAP-25; SNAP; SNAP25;
491 (SUP)	
592	calcitonin receptor precursor (CT-R); C1A/C1B
598	gamma-aminobutyric acid (GABA-A) receptor, beta 1 subunit

Fig. 5. Genes down regulated on day 7

NEUREXIN I-BETA PRECURSOR,Non-processed neurexin I-beta
Synaptic cell surface proteins + NEUREXIN I-ALPHA
PRECURSOR,Non-processed neurexin I-alpha Synaptic cell
600 surface proteins

608 alpha 2B adrenergic receptor (ADRA2B); alpha 2B adrenoceptor
609 neuropeptide Y receptor type 1
621 prostaglandin E2 receptor EP4 subtype

622 alpha 2C adrenergic receptor (ADRA2C); alpha 2C adrenoceptor
624 c-ErbA oncogene; thyroid hormone receptor alpha-1 (THRA1)
gamma-aminobutyric acid receptor alpha 2 subunit precursor
626 (GABA(A) receptor; GABRA2)
629 P2Y PURINOCEPTOR 6 (P2Y6)
639 glutamate receptor 1 precursor (GluR-1); GluR-A; GluR-K1
gamma-aminobutyric acid receptor alpha 3 subunit precursor
640 (GABA(A) receptor; GABRA3)
641 NMDAR2A N-METHYL-D-ASPARTATE RECEPTOR SUBUNIT
P2U PURINOCEPTOR 1 (ATP RECEPTOR) (P2U1)
643 (PURINERGIC RECEPTOR).
650 5-hydroxytryptamine (serotonin) receptor 1B; 5-HT1B
753 glycine receptor, alpha 2A subunit, inhibitory
760 parathyroid hormone receptor PTH2
5-hydroxytryptamine 5A receptor (5HT5A; HTR5A); serotonin
761 receptor; REC17
766 acetylcholine receptor alpha
brain natriuretic peptide (BNP); 5-kDa cardiac natriuretic peptide;
968 ISO-ANP
969 luteinizing hormone, alpha
971 cocaine/amphetamine-induced rat transcript, CART
1028 protein kinase C-binding protein nel homolog 1
1096 14-3-3 protein eta; PKC inhibitor protein-1; KCIP-1
1133 plectin
NVP; neural visinin-like Ca2+-binding protein , VISININ-LIKE
PROTEIN 1 (VILIP-1) (NEURAL VISININ-LIKE PROTEIN 1) (NVL-
1165 1) (NVP-1) (21 KD CABP).

Fig. 6. Genes up regulated on day 14.

geneID	geneName
1103	plasminogen activator inhibitor 2A

Fig. 7. Genes down-regulated on day 14.

geneID	geneName
2	syndecan 3 ras-GTPase-activating protein (GAP); ras p21 protein
13	activator; p120GAP interleukin-6 receptor beta chain; membrane glycoprotein
18	gp130
24	prostatic secretory protein probasin (M-40)
40	A-raf proto-oncogene
64	prothymosin-alpha (PTMA)
86	cadherin 6 precursor; kidney-cadherin (K-cadherin) neurofibromin; neurofibromatosis protein type I (NF1);
125	GTPase stimulatory protein
152	c-H-ras proto-oncogene; transforming G-protein p21
153	HSP84; HSP90-beta; heat shock 90kD protein Neural adhesion molecule F3, RAT NEURAL ADHESION
170	MOLECULE F3, COMPLETE CDS. BIG-1 PROTEIN PRECURSOR; neural cell adhesion protein;
184	neurite outgrowth-promotor
200	potassium channel protein; KSHIIIA3 ATP-sensitive inward rectifier potassium channel subfamily J
201	member 1 (KCNJ1); KAB-1; KIR1.1; ROMK1
236	Band 3 (B3RP3), 3 Cl-HCO3-anion exchanger voltage-gated potassium channel protein KV1.1; RBK1;
243	RCK1; KCNA1
258	potassium channel, inward rectifier 9
275	taurine transporter neuronal acetylcholine receptor protein alpha-3 chain
282	precursor
284	sodium channel I
299	potassium channel protein CDRK neuronal acetylcholine receptor protein alpha 6 subunit
324	precursor (CHRNA6; ACRA6)
327	calcium channel, alpha 1 beta
328	sodium channel, beta 1 subunit PMCA; ATP2B2; calcium-transporting ATPase plasma
331	membrane (brain isoform 2; EC 3.6.1.38); calcium pump 17-kDa ubiquitin-conjugating enzyme E2 (UBE2B); ubiquitin-
403	protein ligase; ubiquitin carrier protein; HR6B synaptosomal associated protein 25; SNAP-25; SNAP;
491	SNAP25; SUP
499	67-kDa glutamic acid decarboxylase (GAD67); GAD1
589	eek proto-oncogene, protein tyrosine kinase, eph/elk-related
596	D(1A) DOPAMINE RECEPTOR growth hormone receptor precursor (GH receptor; GHR);
604	serum-binding protein NMDAR2A N-METHYL-D-ASPARTATE RECEPTOR
641	SUBUNIT
650	5-hydroxytryptamine (serotonin) receptor 1B; 5-HT1B
652	thyroid hormone beta receptor; c-erbA-beta
654	gamma-aminobutyric acid (GABA-A) receptor, beta 3 subunit

Fig. 7. Genes down-regulated on day 14.

glutamate receptor 2 precursor (GLUR-2; GLUR-B; GLUR-681 K2)
709 glutamate receptor 4 precursor (GLUR-4; GLUR-D)
734 cannabinoid receptor 1, neuronal
neuromedin K receptor (NKR); neurokinin B receptor; NK-3
745 receptor (NK-3R)
751 GABA-A receptor gamma-2 subunit precursor
762 galanin receptor 2
insulin-like growth factor binding protein 1 precursor (IGFBP-901 1; IBP-1)
913 presomatotropin
protein kinase C beta-I type (PKC-beta I) + protein kinase C
932 beta-II type (PKC-beta II)
guanine nucleotide-binding protein G(O) alpha subunit
951 (GNAO; GNA0)
guanine nucleotide-binding protein G(I) alpha 1 subunit
965 (GNAI1); adenylate cyclase-inhibiting G alpha protein
976 serine/threonine kinase PCTAIRE2 (PCTK2)
1028 protein kinase C-binding protein nel homolog 1
PKI-alpha; cAMP-dependent protein kinase inhibitor
1054 (muscle/brain form)
1096 14-3-3 protein eta; PKC inhibitor protein-1; KCIP-1
NVP; neural visinin-like Ca²⁺-binding protein , VISININ-LIKE
PROTEIN 1 (VILIP-1) (NEURAL VISININ-LIKE PROTEIN 1)
1165 (NVL-1) (NVP-1) (21 KD CABP).

Fig. 8. Genes whose expression was modulated compared to control rats with no axotomy.

Treatment group vs. control group

AS	AF	BS	BF	AS	AF	BS	BF	AS	AF	BS	BF
5	5			506	506				805		
	8	8	8		507				812		
13	13	13	13					520	814	814	814
	20	20		528	528		528		824	824	824
106	106	106			533				844	844	844
107	107	107	107		545		545		858	858	858
	123				548				873	873	873
	175				558					892	
183	183				559	559	559		899		899
185				562	562				911	911	911
	195		195	563	563				915	915	915
197	197						568		917	917	917
203	203	203	203		571					922	922
220	220				572						925
238	238			590				928			
248	248			604	604	604	604	931	931	931	931
	261			605				936		936	936
262	262	262	262	621				939		939	
	275			628	628	628	628	942		942	
295	295	295	295	644	644	644	644	943	943	943	
	296		296	647	647	647		953	953		
301	301			650	650	650	650	956	956	956	956
	303			661	661	661	661	964	964	964	964
309	309	309	309	673	673	673	673	966	966		
	317		317		675					970	
328	328	328	328	678	678	678	678			974	
354	354	354	354	679	679	679	679	980	980		
355	355	355	355	689	689	689	689	982	982	982	982
357	357			691		691		996	996	996	996
	358		358	699	699			1018			
	373			703	703	703	703	1028	1028	1028	1028
	374			714		714		1062	1062		
374	383		383	715	715	715	715			1088	1088
	407		407	717		717		1096	1096	1096	1096
	411			720	720	720	720	1103	1103	1103	1103
423	423			728	728	728	728	1118			
436	436	436	436		729			1123	1123	1123	
437	437	437	437	730		730			1135	1135	1135
438	438	438	438	741				1147		1147	1147
439	439			742	742	742		1151	1151	1151	1151
	453		453	754	754	754		1155	1155	1155	1155
464	464	464	464	758	758	758	758	1165	1165	1165	1165
477	477	477	477	770	770	770		1169	1169	1169	1169
478	478			774						1173	
480	480			776	776	776	776				
	482			784	784	784	784				
	493			794	794	794	794				
505	505	505	505	798	798						

Fig. 8. Genes whose expression was modulated compared to control rats with no axotomy.

AS: SAM test after normalization

AF: F test after normalization

BS: SAM test before normalization

BF: F test before normalization

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- 1 glypican-1 precursor; HSPG M12; nervous system cell-surface heparan
- 2 syndecan 3
- 3 protocadherin 4
- 4 tumor necrosis factor receptor 1 precursor (TNFR1)
- 5 glutamyl aminopeptidase A
- 6 LIM domain protein CLP36, homologous to rat RIL
- 7 G1/S-specific cyclin D1 (CCND1)
- 8 proliferating cell nuclear antigen (PCNA); cyclin
- 9 antigen peptide transporter 2; TAP2L; APT2; TAP2; MTP2
- 10 androgen binding protein
- 11 fos-related antigen 1 (FOSL1; FRA1)
- 12 transforming growth factor alpha (TGF α); EGF-like TGF; ETGF
- 13 ras-GTPase-activating protein (GAP); ras p21 protein activator; p120GAP
- 14 multidrug resistance protein (MRP)
- 15 rat CD1 antigen precursor
CD44 antigen precursor; phagocytic glycoprotein I (PGP-1); HUTCH-I; extracellular matrix receptor-III (ECMR-III); GP90 lymphocyte
- 16 homing/adhesion receptor; hermes antigen; hyaluronate receptor; LY-24
- 17 T-cell receptor CD3 zeta subunit
- 18 interleukin-6 receptor beta chain; membrane glycoprotein gp130
- 19 NK lymphocyte receptor; NKR-P1B
- 20 LIM, muscle
- 21 G1/S-specific cyclin D2 (CCND2); vin-1 proto-oncogene
- 22 prohibitin (PHB); B-cell receptor-associated protein 32 (BAP32)
- 23 plasma kallikrein (rPK)
- 24 prostatic secretory protein probasin (M-40)
- 25 p21; cip1; waf1
- 26 Crk adaptor protein (CRK-II alternative splice variant); proto-oncogene c-crk
- 27 Sky proto-oncogene; Tyro3; Rse; Dtk
thioredoxin peroxidase 1 (TDPX1); thioredoxin-dependent peroxide
- 28 reductase 1; thiol-specific antioxidant protein (TSA)
- 29 leukocyte common antigen precursor (LCA); CD45 antigen; T200; PTPRC
E-selectin precursor; endothelial leukocyte adhesion molecule 1 (ELAM-1);
- 30 leukocyte-endothelial cell adhesion molecule 2 (LECAM2); CD62E
- 31 T-cell surface glycoprotein CD5 precursor; lymphocyte glycoprotein LY-1
- 32 interleukin-6 receptor alpha precursor (IL-6R-alpha; IL6R)
- 33 Myc-Max-interacting tumor suppressor (MXI1)
- 34 Gax, growth-arrest-specific protein
- 35 G1/S-specific cyclin D3 (CCND3)
- 36 growth arrest and DNA-damage-inducible protein 45 (GADD45)
- 37 natural killer (NK) cell protease 1 (RNKP-1)
- 38 p53 nuclear oncoprotein
- 39 BTG1 protein; anti-proliferative factor
- 40 A-raf proto-oncogene
- 41 c-ros-1 proto-oncogene
- 42 glutathione S-transferase Ya subunit (GST YA); ligandin subunit 1 alpha
- 43 integrin-associated protein form 4
P-selectin precursor; granule membrane protein 140 (GMP-140); PADGEM;
- 44 CD62P; leukocyte-endothelial cell adhesion molecule 3 (LECAM3)
- 45 T-cell receptor gamma subunit
interleukin-2 receptor alpha subunit precursor (IL-2 receptor alpha; IL2RA);
- 46 TAC antigen; CD25 antigen

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- 47 fos-related antigen 2 (FRA2); FOSL2
- 48 Protein kinase C-binding protein beta15; RING-domain containing
- 49 G1/S-specific cyclin E (CCNE)
- 50 microglobulin; beta-2-microglobulin + prostaglandin receptor F2a
- 51 natural killer (NK) cell protease 4 (RNKP-4)
- 52 maspin; protease inhibitor 5 (PI5); tumor suppressor
- 53 rac-beta serine/threonine kinase (rac-PK-beta); AKT2
- 54 casein kinase II beta subunit (CKII; CSNK2B; CK2N); phosvitin
- 55 Mas proto-oncogene; G-protein coupled receptor; Mas-1
- 56 microsomal glutathione S-transferase (GST12; MGST1)
- 57 kidney band 3 anion exchange protein; SLC4A1; AE1
 - L-selectin precursor; lymph node homing receptor; leukocyte adhesion molecule-1 (LAM-1); LY-22; lymphocyte surface MEL-14 antigen; leukocyte-58 endothelial cell adhesion molecule 1 (LECAM1); CD62L
- 59 B7.1
 - urokinase receptor + GPI-anchored form urokinase plasminogen activator
- 60 surface receptor (PLAUR: UPAR); CD87
- 61 Jun-B; c-jun-related transcription factor
 - Lim-2; embryonic motor neuron topographic organizer, HOMEOBOX
- 62 PROTEIN LIM-2 (LIM/HOMEODOMAIN PROTEIN LHX5).
- 63 G2/M-specific cyclin G (CCNG)
- 64 prothymosin-alpha (PTMA)
 - 34A transformation-associated protein; TAP-related matrix
- 65 metalloproteinase 10 (MMP10); stromelysin 2 (SL2); transin 2
- 66 Von Hippel-Lindau tumor suppressor protein (VHL)
 - Nm23-M2; nucleoside diphosphate kinase B; metastasis-reducing protein; c-myc-related transcription factor, NUCLEOSIDE DIPHOSPHATE KINASE A (EC 2.7.4.6) (NDK A) (NDP KINASE A) (TUMOR METASTATIC PROCESS-67 ASSOCIATED PROTEIN) (METASTASIS INHIBITION FACTOR NM23
- 68 Pim-1 proto-oncogene
 - NF-2; moesin-ezrin-radixin-like protein (MERLIN); shwannomin;
- 69 neurofibromatosis type 2 susceptibility protein
- 70 glutathione S-transferase Yb subunit; GST subunit 4 mu (GSTM2)
- 71 myelin P0 protein precursor; MPZ
 - ecto-ATPase precursor; cell-CAM 105 (C-CAM 105); ATP-dependent
- 72 taurocolate-carrier protein; GP110
- 73 leukocyte surface antigen CD53; leukocyte antigen MRC-OX44; cell surface
- 74 signal transducer CD24 precursor; heat stable antigen (HSA); nectadrin
- 75 Jun-D; c-jun-related transcription factor
- 76 growth arrest and DNA-damage-inducible protein 153 (GADD153)
- 77 cyclin-dependent kinase 2 alpha (CDK2-alpha) + cyclin-dependent kinase 2-
- 78 inducible nitric oxide synthase (iNOS); type II NOS
 - matrix metalloproteinase 14 precursor (MMP14); membrane-type matrix
- 79 metalloproteinase 1 (MT-MMP1)
- 80 Wilms' tumor protein (WT1); tumor suppressor
 - NDK-B; nucleoside diphosphate kinase B; metastasis-reducing protein; c-myc-related transcription factor (18 kDa subunit), NUCLEOSIDE
- 81 DIPHOSPHATE KINASE B (EC 2.7.4.6) (NDK B) (NDP KINASE B) (P18).
- 82 c-raf proto-oncogene; raf-1
- 83 MSH2 DNA mismatch repair protein
- 84 glutathione S-transferase subunit 5 theta (GST5-5)

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- annexin V (ANX5); lipocortin 5; placental anticoagulant protein I (PAP-I);
- 85 endonexin II; calphobindin I (CBP-I); PP4; thromboplastin inhibitor; vascular
- 86 cadherin 6 precursor; kidney-cadherin (K-cadherin)
- 87 CD4 homologue, W3/25 antigen
- 88 CD28, T-cell surface antigen
- 89 Max; c-myc dimerization partner & coactivator
- 90 DNA-binding protein inhibitor ID1
 - cyclin-dependent kinase 7 (CDK7); CDK-activating kinase (CAK); 39-kDa
- 91 protein kinase; homolog of *Xenopus* MO15
 - cytosolic phospholipase A2 (CPLA2); phosphatidylcholine 2-acylhydrolase;
- 92 lysophospholipase;PLA2G4
 - proteasome delta subunit precursor; macropain delta; multicatalytic
- 93 endopeptidase complex delta; proteasome subunit Y; proteasome subunit 5;
- 94 c-fos proto-oncogene
 - DCC; netrin receptor; immunoglobulin gene superfamily member; former
- 95 tumor suppressor protein candidate
- 96 c-fgr proto-oncogene
- 97 adenomatous polyposis coli protein (APC)
- 98 glutathione S-transferase P subunit; GST subunit 7 pi (GST7-7)
- 99 CD9, surface glycoprotein, platelet
- 100 short type PB-cadherin
- 101 CD3, gamma chain
 - advanced glycosylation end product-specific receptor precursor (AGER);
- 102 receptor for advanced glycosylation end products (RAGE)
- 103 cAMP-response element binding protein 1 (CREBP1)
- 104 Id-2; DNA-binding protein inhibitor; HLH protein
- 105 GAK; cyclinG-associated kinase
- 106 cathepsin E
- 107 proteasome subunit R-ring12
- 108 c-myc proto-oncogene
 - Neogenin, DCC netrin receptor-related protein; immunoglobulin gene
- 109 superfamily member; former tumor suppressor protein candidate
- 110 fyn proto-oncogene; p59fyn
- 111 p130; retinoblastoma gene product-related protein Rb2/p130; cell cycle
- 112 liver carboxylesterase 10 precursor; carboxyesterase ES-10; PI 6.1
- 113 integral membrane protein E16 (TA1); L-type amino acid transporter 1
- 114 integrin, alpha 1
- 115 CD8, 37 kDa membrane protein, thymocyte
- 116 CD2, membrane glycoprotein, T-cell marker
- 117 I-kB (I-kappa B) alpha chain; RL/IF-1 gene product
- 118 Id-3; DNA-binding protein inhibitor; HLH protein
- 119 p58/GTA; galactosyltransferase associated protein kinase (cdc2-related)
- 120 interferon-induced GTP-binding, mx1
 - proteasome component C13 precursor; macropain subunit C13;
- 121 multicatalytic endopeptidase complex subunit C13; PSMB8
- 122 N-myc proto-oncogene protein
- 123 c-kit proto-oncogene
- 124 rac-alpha serine/threonine kinase (RAC-PK-alpha); protein kinase B (PKB);
- 125 neurofibromin; neurofibromatosis protein type I (NF1); GTPase stimulatory
- 126 glutathione S-transferase subunit 13
 - NEUROGLYCAN C PRECURSOR; membrane-spanning chondroitin sulfate
- 127 proteoglycan; restricted to the brain

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- 128 cadherin; proton-driven peptide transporter
 BST-1; bone marrow stromal antigen 1; lymphocyte differentiation antigen
- 129 CD38; ADP-ribosyl cyclase 2
- 130 scavenger receptor class B type I
- 131 signal transducer & activator of transcription 3 (STAT3)
- 132 elongation factor SIII P15 subunit
- 133 p27Kip1
- 134 interferon-induced GTP-binding protein mx2 + interferon-induced GTP-
- 135 apolipoprotein A-I precursor (APO-AI)
- 136 c-jun proto-oncogene; transcription factor AP-1; RJG-9
- 137 basic fibroblast growth factor receptor 1 precursor (BFGF-R); MFR; FGFR1;
- 138 c-mos, proto-oncogene
- 139 heat shock 27-kDa protein (HSP27)
- 140 epididymal secretory glutathione peroxidase
- 141 AMPHOTROPIC MURINE RETROVIRUS RECEPTOR.
- 142 vascular cell adhesion protein 1 precursor (V-CAM 1)
 cationic amino acid transporter-1 (CAT-1); system Y+ basic amino acid
- 143 transporter; ecotropic retroviral leukemia receptor; ecotropic retrovirus
- 144 transferrin receptor protein; p90; CD71
 NF-kappa-B transcription factor p105 subunit (NFKB p105); NF-kappa-B1
- 145 P84; NF-kappa-B1 P98 (NFKB1); DNA-binding factor KBF1; EBP-1
- 146 Cdk3 protein kinase; cdc2/CDC28-like
- 147 cyclin-dependent kinase 4 inhibitor B (CDKN2B); p14-INK4B; p15-INK5B
- 148 ATPase, transitional endoplasmic reticulum
- 149 apolipoprotein A-IV precursor (APO-AIV)
- 150 S-myc proto-oncogene protein; myc-related
 erbB2 receptor protein-tyrosine kinase precursor; p185ERBB2; neu proto-
- 151 oncogene; epidermal growth factor receptor- related protein
- 152 c-H-ras proto-oncogene; transforming G-protein p21
- 153 HSP84; HSP90-beta; heat shock 90kD protein
- 154 phospholipid hydroperoxide glutathione peroxidase
- 155 fibronectin receptor beta subunit precursor; integrin beta 1
- 156 receptor protein-tyrosine phosphatase zeta/beta (R-PTP-Z)
- 157 MAL; T-lymphocyte maturation-associated protein; myelin protein MVP17
- 158 Non-processed neurexin III-alpha, NEUREXIN III-ALPHA, ISOFORM D
- 159 CREB active transcription factor; transcription activator protein
- 160 MeCP-2; methyl-CpG DNA-binding protein 2
- 161 M-phase inducer phosphatase 2 (MPI2); cell division control protein 25 B
 glucose-regulated 78-kDa protein (GRP78); BiP; immunoglobulin heavy
- 162 chain binding protein; steroidogenesis-activator polypeptide; HSPA5
- 163 insulin-like growth factor binding protein, complex acid-labile subunit
- 164 c-ets-1 proto-oncogene protein; p54
- 165 ErbB3 EGF receptor-related proto-oncogene; HER3
- 166 c-N-ras proto-oncogene; transforming G-protein p21
 heat shock 60-kDa protein (HSP60); 60-kDa chaperonin (CPN60); GroEL
- 167 homolog; mitochondrial matrix protein P1; p60 lymphocyte protein
- 168 glutathione S-transferase, Yrs-Yrs inactivating
- 169 integrin beta 4 precursor
- 170 Neural adhesion molecule F3, RAT NEURAL ADHESION MOLECULE F3,
- 171 fasl receptor; fas antigen precursor; Apo-1 antigen
- 172 SR13 myelin protein; peripheral myelin protein 22 (PMP-22); CD25 protein
- 173 interferon regulatory factor 1 (IRF1)

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- 174 G2/M-specific cyclin B1 (CCNB1)
- 175 RCL; c-Myc-responsive gene, growth-related
Regenerating protein III (reg III). PANCREATITIS-ASSOCIATED PROTEIN
- 176 2 PRECURSOR (LITHOSTATHINE 3) (ISLET OF LANGERHANS
von ebner's gland protein 2; VEG protein 2; VEGP2 + von ebner's gland
- 177 protein 1; VEG protein 1; VEGP1; VEGP
- 178 cysteine-rich protein 2 (CRP2); ESP1
- 179 trk, proto-oncogene, precursor
- 180 c-K-ras 2b proto-oncogene; transforming G-protein p21
- 181 heat shock 70-kDa protein (HSP70)
- 182 glutathione transferase, subunit 8
platelet glycoprotein IV (GPIV); GPIIB; CD36 antigen; fatty acid translocase
- 183 (FAT); PAS4; adipocyte membrane protein
- 184 BIG-1 PROTEIN PRECURSOR; neural cell adhesion protein; neurite
- 185 CD 30L receptor; lymphocyte activation antigen CD30; Ki-1 antigen; CD30
ADP-RIBOSYL CYCLASE 1 (EC 3.2.2.5) (CYCLIC ADP-RIBOSE
- 186 HYDROLASE 1) (CADPR HYDROLASE 1) (CD38-HOMOLOGOUS
- 187 New England Deaconess transcription factor
- 188 G1/S-specific cyclin C (CCNC)
- 189 p55cdc; cell division control protein 20
- 190 antigen peptide transporter 1
- 191 apolipoprotein D
Rb; pp105; retinoblastoma susceptibility-associated protein; tumor
- 192 suppressor gene; cell cycle regulator
- 193 platelet-derived growth factor B-chain (PDGFb); c-sis
- 194 rab8, ras related GTPase
- 195 major vault protein (MVP)
- 196 NADPH-cytochrome P450 reductase (CPR); POR
- 197 P450 1B1; C3H cytochrome P450; CYP1B1
- 198 zinc transporter (ZnT-1)
- 199 sodium channel SHRSRPHD, beta subunit, epithelial
- 200 potassium channel protein; KSHIIIA3
ATP-sensitive inward rectifier potassium channel subfamily J member 1
- 201 (KCNJ1); KAB-1; KIR1.1; ROMK1
- 202 chloride channel CIC-1, skeletal muscle
CCHB3; calcium channel (voltage-gated); DIHYDROPYRIDINE-SENSITIVE
- 203 L-TYPE, CALCIUM CHANNEL BETA-3 SUBUNIT.
beta-alanine-sensitive neuronal GABA transporter; sodium- & chloride-
- 204 dependent GABA transporter 3
- 205 sodium/phosphate cotransporter 1
potassium-transporting ATPase alpha subunit; proton pump; gastric H+/K+
- 206 ATPase alpha subunit (HKA); ATP4A
- 207 water channel aquaporin 3 (AQP3)
- 208 water channel integral protein chip 28k
- 209 syntaxin A
- 210 synaptobrevin 1 (SYB1); vesicle-associated membrane protein 1 (VAMP1)
- 211 3-methylcholanthrene-inducible cytochrome P450 (P450MC); cytochrome
- 212 BRAIN DIGOXIN CARRIER PROTEIN
- 213 5-hydroxytryptamine (serotonin) receptor 3; 5HT3
- 214 G-protein activated K+ inward rectifier

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

215 G protein-activated inward rectifier potassium channel 4 (GIRK4); inward rectifier potassium channel subfamily J member 5 (KCNJ5); heart KATP channel; KATP-1; cardiac inward rectifier (CIR); KIR3.4

216 chloride channel CIC-2

217 sodium-dependent serotonin transporter; 5HT transporter (5HTT)
fibroblast ADP/ATP carrier protein; ADP/ATP translocase 2; adenine nucleotide translocator 2 (ANT2)

218 glucose transporter, sodium-dependent, SGLT2

219 sodium/potassium-transporting ATPase beta 1 subunit (ATP1B1)

220 peptide/histidine transporter

221 water channel, kidney collecting duct

222 synaptotagmin V

223 synaptobrevin 2 (SYB2); vesicle-associated membrane protein 2 (VAMP2)

224 cytochrome P450 VII (CYP7); cholesterol 7-alpha-monoxygenase; glucose transporter type 1 (erythrocyte/brain)

225 cyclic nucleotide-activated channel, olfactory

226 chloride channel protein 3 (CLC3; CLCN3)

227 ISK slow voltage-gated potassium channel protein; mink potassium channel;

228 potassium channel RB-IRK2, inward rectifier
dopamine transporter (cocaine-sensitive); sodium-dependent dopamine transporter (DA transporter; DAT)

229 kidney oligopeptide transporter; peptide transporter 2 (PEPT2); kidney H₊/peptide cotransporter; SLC15A2

230 sodium/dicarboxylate cotransporter

231 brain calcium-transporting ATPase plasma membrane 1; calcium pump;

232 cardiac delayed rectifier potassium channel protein

233 Band 3 (B3RP3), 3 Cl-HCO₃-anion exchanger
annexin I (ANX1); lipocortin I; calpactin II; chromobindin 9; P35;

234 phospholipase A2 inhibitory protein
epidermal fatty acid-binding protein (E-FABP); cutaneous fatty acid- binding protein (C-FABP); DA11; FABP5

235 cytochrome P450 2E1 (CYP2E1); P450-J; P450RLM6

236 glucose transporter protein

237 acetylcholine receptor gamma

238 chloride channel protein 5 (CLCN5; CLC5)

239 voltage-gated potassium channel protein KV1.1; RBK1; RCK1; KCNA1

240 potassium channel, inward rectifier 11

241 high affinity L-proline transporter
renal sodium-dependent phosphate transport protein 2; sodium/phosphate cotransporter 2; renal Na⁺-dependent phosphate cotransporter 2; SLC17A2

242 sodium/calcium exchanger NCX3

243 sodium/potassium-transporting ATPase beta 2 subunit (ATP1B2)

244 aquaporin (pancreas & liver; AQP 8)

245 organic anion transporter

246 SYNAPTOTAGMIN XI; membrane trafficking protein

247 fatty acid-binding protein (liver; L-FABP); Z-protein; squalene- & sterol-cytochrome P450 IA2 (CYPIA2); P450-D; P448 + cytochrome P450

248 glucose transporter 3

249 acetylcholine receptor delta
ATP-sensitive inward rectifier potassium subfamily J member 8 (KCNJ8);

250 UKATP-1; ATP-sensitive inwardly rectifying K⁺ channel KIR6.1

251 skeletal muscle sodium channel protein alpha subunit (SCN4A); MU-1

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- 258 potassium channel, inward rectifier 9
- 259 sodium/bile acid cotransporter; sodium/taurocholate cotransporting gamma-aminobutyric acid transporter 1 (GABT1; GAT1); sodium- & chloride-
- 260 dependent GABA transporter 1; SLC6A1
- 261 neurotransmitter transporter, sodium dependent
- 262 calcium-transporting ATPase 3; calcium pump; SERCA3; ATP2A3
- 263 urea transporter
- 264 urate transporter/channel
- 265 RIM; Rab3 effector in synaptic-vesicle fusion
- 266 fatty acid-binding protein (heart; H-FABP)
- 267 cytochrome P450 4B1 (CYP4B1); P450-isozyme 5
- 268 fructose (glucose) transporter
- 269 ATP ligand gated ion channel
- 270 voltage gated potassium channel; kv43
 - voltage-dependent L-type calcium channel alpha 1D subunit (CACNA1D); L-
- 271 type calcium channel alpha 1 polypeptide isoform 2 (CCHL1A2); rat brain
- 272 potassium channel-like protein KATP2, beta cell
- 273 cationic amino acid transporter 3
- 274 sodium/hydrogen exchange protein 1
- 275 taurine transporter
 - potassium-transporting ATPase beta subunit (ATP4B); proton pump; gastric
- 276 H+/K+ ATPase beta subunit
- 277 voltage-gated sodium channel (atypical)
- 278 ATP synthase lipid-binding protein P1 precursor; ATPase protein 9; ATP5G1
- 279 lipocortin 2
- 280 fatty acid-binding protein (intestinal; I-FABP; FABPI)
- 281 cytochrome P-450 14 DM???? + sterol 14-demethylase pseudogene
- 282 neuronal acetylcholine receptor protein alpha-3 chain precursor
- 283 purinergic receptor P2X5, ligand-gated ion channel
- 284 sodium channel 1
 - voltage-dependent L-type calcium channel alpha 1C subunit (CACNA1);
cardiac muscle L-type calcium channel alpha 1 polypeptide isoform 1
- 285 (CCHL1A1); rat brain class C (RBC); CACH2; CACN2
- 286 potassium channel Kir6.2, inward rectifier, ATP-sensitive
- 287 glycine transporter
- 288 sodium/hydrogen exchange protein 3
- 289 glutamate transporter, sodium-dependent,high-affinity (EAAT4)
- 290 ATPase, hydrogen-potassium, alpha 2a subunit
- 291 vesicular acetylcholine transporter RVAT
- 292 ATP synthase, subunit c, P2 gene
- 293 amphiphysin II (AMPH2)
 - nonspecific lipid-transfer protein precursor (NSL-TP); sterol carrier protein 2
- 294 (SCP2); sterol carrier protein X (SCPX)
- 295 copper-zinc-containing superoxide dismutase 1 (Cu-Zn SOD1)
- 296 degenerin channel MDEG; amiloride-sensitive brain sodium channel BNAC1
- 297 sodium channel, amiloride sensitive, alpha subunit; SCNEA; alpha NACH;
- 298 cardiac specific sodium channel alpha subunit
- 299 potassium channel protein CDRK
- 300 chloride channel CIC-7
- 301 monocarboxylate transporter MCT1
- 302 sodium/hydrogen exchange protein 4
- 303 SYNAPTIC VESICLE PROTEIN 2B

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- 304 ATPase, calcium, brain
- 305 aquaporin 7 (AQP7)
- 306 myelin proteolipid protein (PLP); DM-20; lipophilin
- 307 intrinsic factor precursor (INF; IF); gastric intrinsic factor (GIF)
- 308 adipocyte fatty acid-binding protein (AFABP; FABP4); adipocyte lipid-binding
- 309 plasma glutathione peroxidase precursor (GSHPX-P; GPX3); selenoprotein
- 310 neuronal acetylcholine receptor protein alpha 5 subunit precursor (CHRNA5;)
- 311 sodium channel SHRSPHD, gamma subunit, epithelial
- 312 sodium channel protein 6 (SCP6)
- 313 calcium channel, L-type, dihydropyridine-sensitive, alpha 2 subunit
- 314 potassium channel, voltage gated, KV3.1; RAW2; KV4; NGK2; KCNC1
- 315 sodium dependent sulfate transporter
- 316 gamma-aminobutyric acid (GABA) transporter 2
- 317 sodium-glucose cotransporter 1
- 318 ATPase, sodium/potassium, alpha(+) isoform catalytic subunit
- 319 anion exchange protein 2 (AE2); non-erythroid band 3-like protein (B3RP);
- 320 myelin-associated glycoprotein precursor (L-MAG/S-MAG); brain neuron
low-density lipoprotein receptor-related protein 2 precursor (LDL receptor;)
- 321 LRP2); megalin; glycoprotein 330
- 322 testis lipid-binding protein (TLBP); 15-kDa perforatorial protein (PERF15);
- 323 renal organic anion transporter (ROAT1) + multispecific organic anion
- 324 neuronal acetylcholine receptor protein alpha 6 subunit precursor (CHRNA6;)
- 325 purinergic receptor P2X3, ligand-gated ion channel
voltage-dependent P/Q-type calcium channel alpha-1A subunit (CACNA1A);
L type calcium channel alpha-1 polypeptide isoform 4 (CACNL1A4);
- 326 CACH4); brain calcium channel I; rat brain brain class A (RBA-1); CACN3
- 327 calcium channel, alpha 1 beta
- 328 sodium channel, beta 1 subunit
- 329 sodium-hydrogen exchange protein-isoform 2 (NHE-2)
- 330 glutamate/aspartate transporter, cochleae
PMCA; ATP2B2; calcium-transporting ATPase plasma membrane (brain)
- 331 isoform 2; EC 3.6.1.38); calcium pump
- 332 ATPase, sodium/potassium, gamma subunit
G protein-activated inward rectifier potassium channel 1 (GIRK1); inward
- 333 rectifier potassium channel subfamily J member 3 (KCNJ3); KGA; KGB1;
- 334 fibrinogen beta subunit (FGB)
- 335 Amphiphysin; Amph1
- 336 synaptotagmin I
- 337 kidney specific organic anion transporter OAT-K1
- 338 neuronal acetylcholine receptor protein alpha 7 subunit precursor (CHRNA7;)
- 339 neuronal nicotinic acetylcholine receptor alpha 2 subunit
- 340 proton gated cation channel drasic; sensory neuron specific
- 341 sodium channel SCNB2, beta 2 subunit, brain
- 342 sodium channel 2, brain
- 343 proton-coupled dipeptide cotransporter
- 344 sodium/chloride neurotransmitter transporter
- 345 sulfonylurea receptor
- 346 ATPase, copper-transporting, Menkes protein
- 347 channel-inducing factor precursor (CHIF); corticosteroid-induced protein
- 348 MYELIN BASIC PROTEIN S (MBP S)
- 349. Sec1; syntaxin binding protein 1; UNC-18A; UNC-18-1; N-SEC1; RBSEC1
- 350 synaptotagmin II

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- 351 organic cation transporter 2 (OCT2)
- 352 sulfonylurea receptor (SUR)
- 353 P2X purinoceptor 2; ATP receptor P2X2; purinergic receptor
- 354 ASIC1 proton gated cation channel
- 355 potassium channel drk1, delayed rectifier
- 356 potassium channel RCK3, subunit, putative
- 357 GluT and GluT-R glutamate transporter
- 358 sodium/calcium exchanger NCX2
- 359 Na⁺/K⁺ ATPase alpha 1 subunit
- 360 multidrug resistance protein (MDR1); P-glycoprotein (PGY1)
- 361 water channel, aquaporin 4, mercurial-insensitive
- 362 synapsin 2A
- 363 synaptotagmin IV (SYT4)
- 364 synaptotagmin III (SYT3)
- 365 organic cation transporter 1A (OCT1A)
- 366 cyclic nucleotide-gated channel, olfactory
- 367 glycine receptor alpha 3 subunit precursor (GLRA3)
- 368 voltage-gated K⁺ channel protein; RK5; potassium channel protein
- 369 potassium channel RCK2
- 370 potassium channel RCK4, subunit, putative
- 371 liver Na⁺/Cl⁻ betaine/GABA transporter
- 372 sodium-potassium-chloride cotransporter, bumetanide-sensitive
- 373 Na,K-ATPase beta 3 subunit
- 374 synaptic vesicle protein 2 (SV2)
- 375 water channel, aquaporin 5
- 376 annexin IV(ANX4); lipocortin IV;36-kDa zymogen granule membrane-
- 377 synapsins IA & IB (SYN1)
- 378 syntaxin 3 (STX3)
- 379 multidrug resistance protein 2 (MDR2); P-glycoprotein (PGY2)
- 380 purinergic receptor P2X4, ligand-gated ion channel
 - voltage-activated calcium channel alpha-1 subunit (RBE-II); nickel-sensitive
- 381 T-type calcium channel alpha-1 subunit
- 382 inward rectifier potassium channel subfamily J member 2 (KCNJ2); RBL-
- 383 potassium channel, voltage gated, KV3.4; RAW3; KCNC4
- 384 calcium channel, beta subunit, brain
 - excitatory amino acid transporter 3 (EAAT3); sodium-dependent
- 385 glutamate/aspartate transporter 3; excitatory amino-acid carrier 1 (EAAC1);
- 386 sodium/chloride cotransporter, thiazide sensitive
- 387 vacuolar ATP synthase 16-kDa proteolipid subunit; ATP6C; MVP; ATPL
 - synaptic vesicle amine transporter (SVAT); monoamine transporter;
- 388 vesicular amine transporter 2 (VAT2)
- 389 fatty acid transport protein
- 390 epimorphin (EPIM); syntaxin 2 (STX2)
- 391 secretogranin II precursor (SGII; SCG2); chromogranin C (CHGC)
- 392 syntaxin 4 (STX4)
- 393 syntaxin 5 (STX5)
- 394 Rab GDI alpha; Rab GDP-dissociation inhibitor alpha; GDI-1
- 395 cytochrome B5 (CYB5)
- 396 mitochondrial ATP synthase D subunit; ATP5H
- 397 colipase precursor
 - steryl-sulfatase precursor (EC 3.1.6.2); steroid sulfatase; steryl-sulfate
- 398 sulfohydrolase; arylsulfatase C (ASC)

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

3-beta-hydroxysteroid dehydrogenase/delta-5-->-4 isomerase, type 1;
3BETA-HSD I + 3-beta-hydroxysteroid dehydrogenase/delta-5-->-4
399 isomerase, type 2; 3BETA-HSD II + 3-beta-hydroxysteroid
400 cytochrome P-450 4F5
401 liver arginase 1 (ARG1)
402 calmodulin (CALM; CAM)
17-kDa ubiquitin-conjugating enzyme E2 (UBE2B); ubiquitin-protein ligase;
403 ubiquitin carrier protein; HR6B
404 40S ribosomal protein S17 (RPS17)
405 P2X purinoceptor 1; ATP receptor P2X1; purinergic receptor; RP-2 protein
406 c-met proto-oncogene; hepatocyte growth factor receptor
407 syntaxin 6
cytosolic hydroxymethylglutaryl-CoA synthase (HMG-CoA synthase;
408 HMGCS1); 3-hydroxy-3-methylglutaryl CoA synthase
409 medium chain acyl-CoA dehydrogenase precursor (MCAD; ACADM)
410 mitochondrial ATP synthase beta subunit precursor (ATP5B)
411 acetyl-CoA carboxylase (ACC); biotin carboxylase
lecithin:cholesterol acyltransferase (EC 2.3.1.43; LCAT);
412 phosphatidylcholine-sterol O-acyltransferase; phospholipid-cholesterol
413 cytochrome P450 2C11 (CYP2C11); P450(M-1); P450H; P450-UT-A; UT2
414 cytochrome P-450 4F6
glutamate-cysteine ligase catalytic subunit (GLCLC); gamma-
415 glutamylcysteine synthetase; gamma-ECS; GCS heavy chain
416 uricase; urate oxidase (UOX)
calcium binding protein 2 (CABP2); endoplasmic reticulum stress protein
417 (ERP72); protein disulfide isomerase-related protein precursor
Fte-1; putative v-fos transformation effector protein; yeast mitochondrial
418 protein import homolog; 40S ribosomal protein S3A ; RPS3A
419 dC-stretch binding protein (CSBP); heterogeneous nuclear ribonucleoprotein
420 mannose-6-phosphate/insulin-like growth factor II receptor (M6P/IGFR2)
421 syntaxin B
422 type 1 hexokinase (HK1); brain hexokinase
423 alcohol dehydrogenase A subunit; alcohol dehydrogenase class 1 (ADH1)
424 mitochondrial ATP synthase B subunit precursor; ATP5F1
425 mitochondrial carnitine O-palmitoyltransferase I liver isoform (CPT I-L)
426 fatty acid amide hydrolase
427 cytochrome P450 2A3 (CYP2A3); coumarin 7-hydroxylase
428 cytochrome P-450 2C23, arachidonic acid epoxygenase
429 mitochondrial carnitine O-palmitoyltransferase II precursor (CPT II; CPT2)
430 ceruloplasmin precursor (CP); ferroxidase
431 serine proteinase rPC7 precursor (PCSK7)
432 eukaryotic translation initiation factor 5 (EIF-5)
433 SURVIVAL OF MOTOR NEURON(RSMN)
434 platelet-derived growth factor alpha receptor (PDGFR α)
435 chromaffin granule amine transporter
galactoside 2-L-fucosyltransferase 1 (FUT1; FTA); alpha 1,2
436 fucosyltransferase 1 (alpha(1,2)FT1); GDP-L-fucose:beta- D-galactoside 2-
437 testis-specific cytochrome C (CYCT)
438 ATP synthase, H $+$, alpha subunit, mitochondrial
brain long-chain fatty acid-CoA ligase (LACS); acyl-CoA synthetase (+
439 phosphatidylinositol 4-kinase?)

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

3-beta hydroxy-5-ene steroid dehydrogenase type III (3beta-HSD III; EC 440 1.1.1.145); steroid delta-isomerase (EC 5.3.3.1); progesterone reductase
441 cytochrome P450 3A1 (CYP3A1); P450-PCN1
P450 IIA1; P-450a; 3-methylcholanthrene -inducible cytochrome P450;
442 testosterone 7-alpha-hydroxylase; P450-UT-F. + P450 IIA2
glutamate-cysteine ligase regulatory subunit (GLCLR); gamma-
443 glutamylcysteine synthetase; gamma-ECS; GCS light chain
444 carbonic anhydrase III (CA3); carbonic anhydratase III
445 60S ribosomal protein L44; L36A
446 elongation factor 2 (EF2)
447 apolipoprotein B mRNA editing protein (APOBEC-1); REPR
448 vascular endothelial growth factor receptor 1 (VEGFR1); fms-related
449 cellubrevin
galactoside 2-L-fucosyltransferase 2 (FUT2; FTB); alpha 1,2
fucosyltransferase 2 (alpha(1,2)FT2); GDP-L-fucose:beta- D-galactoside 2-
450 alpha-L-fucosyltransferase 2; secretor blood group alpha-2-
mitochondrial hydroxymethylglutaryl-CoA synthase precursor (HMG-CoA
451 synthase); 3-hydroxy-3-methylglutaryl-CoA synthase; HMGCS2
452 cytosolic acyl-CoA thioester hydrolase (ACT); long chain acyl-CoA hydrolase
mitochondrial muscle carnitine O-palmitoyltransferase I(CPTI-M); carnitine
453 palmitoyltransferase I-like protein; CPT1B
alcohol sulfotransferase A (EC 2.8.2.2); hydroxysteroid sulfotransferase A;
454 STA; androsterone-sulfating sulfotransferase (AD-ST); ST-40
455 cytochrome P450 2C7 (CYP2C7); P450F; PTF1
456 arachidonate 12-lipoxygenase (12-LOX; ALOX12)
457 glutathione synthetase (GSH synthetase; GSH-S; GSS); glutathione
458 carbonic anhydrase 4
459 40S ribosomal protein S12
460 mitochondrial elongation factor G precursor (MEF-G)
461 high mobility group protein 2 (HMG2)
462 BDNF/NT-3 growth factor receptor precursor; trkB tyrosine kinase; gp145-
463 fatty acid binding protein, brain
464 fructose-bisphosphate aldolase B (ALDOB); liver-type aldolase
465 cytochrome oxidase, subunit I, Sertoli cells
466 3-ketoacyl-CoA thiolase A + 3-ketoacyl-CoA thiolase B
467 acyl-CoA dehydrogenase, short-branched-chain
2-hydroxyacylspingosine 1-beta-galactosyltransferase precursor; UDP-
468 galactose-ceramide galactosyltransferase; ceramide UDP-
469 cytochrome P450 4A3 (CYP4A3); lauric acid omega-hydroxylase; P450-LA-
470 aldehyde dehydrogenase 2, retinaldehyde-specific
471 arginase 2
472 carbonic anhydrase 5
473 ribosomal protein S4
474 initiation factor, eukaryotic, (eIF-4E)
475 Set beta isoform + Set alpha isoform; neural plasticity-related protein
476 bone morphogenetic protein type IA receptor
477 syntaxin binding protein Munc18-2
478 fructose-bisphosphate aldolase A (ALDOA); muscle-type aldolase
479 ATPase, subunit F, vacuolar (vatf)
480 creatine kinase, ubiquitous, mitochondrial
bile-salt-activated lipase precursor (BAL); bile-salt-stimulated lipase (BSSL);
481 carboxyl ester lipase; sterol esterase; cholesterol esterase; pancreatic

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- 482 phosphatidate phosphohydrolase type 2
- 483 cytochrome P450 4A8 (CYP4A8); P450-KP1; P450-PP1
- 484 lysophospholipase
- 485 dopa/tyrosine sulfotransferase
- 486 11-beta-hydroxysteroid dehydrogenase 2
- 487 ribosomal protein L11
- 488 eukaryotic translation initiation factor 2 alpha subunit (EIF-2-alpha)
- 489 high mobility group protein 1; amphoterin; heparin binding protein P30; transforming growth factor beta receptor type 1 precursor (TGF-beta)
- 490 receptor type 1; TGFBR1; TGFR1); serine/threonine-protein kinase receptor
- 491 synaptosomal associated protein 25; SNAP-25; SNAP; SNAP25; SUP
- 492 long chain acyl-CoA synthetase 2 (LACS2); liver long chain fatty acid-CoA
- 493 cytochrome c oxidase, subunit VIa, heart
sterol 26-hydroxylase mitochondrial precursor (EC 1.14.-.-); vitamin D(3) 25-
- 494 hydroxylase; 5-beta-cholestane-3-alpha,7-alpha,12-alpha-triol 27-
- 495 perilipin A/B (PERIA/PERIB); lipid droplet-associated proteins A/B
- 496 squalene monooxygenase; squalene epoxidase (SQLE; SE); ERG1
- 497 cytochrome P450 2C22 (CYP2C22); P450 MD; P450 P49
- 498 mitochondrial adenylate kinase 2 (AK2); ATP/AMP transphosphorylase
- 499 67-kDa glutamic acid decarboxylase (GAD67); GAD1
- 500 gamma-aminobutyric acid (GABA) transaminase
- 501 ribosomal protein L13
- 502 bcl-2-associated death promoter (BAD)
- 503 TGF-beta receptor type III; betaglycan; candidate tumor suppressor gene
- 504 epidermal growth factor receptor (EGF receptor; EGFR)
- 505 Huntington associated 1B
- 506 aldolase C
- 507 cytochrome c oxidase, subunit IV, mitochondrial
- 508 fatty acid synthase
- 509 3-oxo-5-alpha-steroid 4-dehydrogenase 2; steroid 5-alpha-reductase 2 (SR)
- 510 annexin III (ANX3); lipocortin 3; placental anticoagulant protein III (PAP-III);
- 511 cytochrome P-450 4F1, hepatic tumour
- 512 adenylate kinase 1 (AK1); ATP/AMP transphosphorylase; myokinase
- 513 glutamic acid decarboxylase (GAD65)
- 514 aldehyde dehydrogenase 2, mitochondrial, liver
- 515 ribosomal protein L10
- 516 BAX-alpha
- 517 KDR/flk1 vascular endothelial growth factor tyrosine kinase receptor
- 518 transforming growth factor-beta II receptor precursor (TGF-beta II receptor; p38)
- 519 synaptophysin, p38
testis fructose-6-phosphate 2-kinase/fructose 2,6-biphosphate (testis 6PF-2-
- 520 K/fru-2,6-P2ase); 6-phosphofructo- 2-kinase; fructose-2,6-bisphosphatase
- 521 cytochrome c oxidase, subunit Va, mitochondrial
- 522 pancreatic lipase related protein 2 precursor; secretory glycoprotein GP-3
- 523 20-alpha-hydroxysteroid dehydrogenase; 20-alpha-HSD; HSD1)
- 524 cytochrome P450 17 (CYP17); P450C17; CYPXVII; steroid 17-alpha-
- 525 cytochrome P-450 4F4
- 526 thymidylate synthase (TYMS; TS)
- 527 glutathione reductase
- 528 alkaline phosphatase
- 529 ribosomal protein L12
- 530 bcl-2

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- 531 low-affinity nerve growth factor receptor precursor (NGF receptor; NGFR);
- 532 insulin-like growth factor I receptor alpha subunit (IGF-I-R alpha)
- 533 NEURODEGENERATION ASSOCIATED PROTEIN 1; downregulated by
- 534 sucrase isomaltase
- 535 cytochrome c oxidase, subunit VIIa
- 536 hormone sensitive lipase (EC 3.1.1.-; HSL)
- 537 lipoprotein lipase precursor (LPL)
- 538 aldehyde dehydrogenase 3, microsomal
- 539 cytochrome P-450 2J3
- 540 cytosolic thymidine kinase (TK1)
- 541 long chain-specific acyl-CoA dehydrogenase precursor (LCAD; ACADL)
- 542 dopamine beta-hydroxylase
- 543 S19; 40S ribosomal protein S19
- 544 bcl-x; bcl2-L1
- 545 erythropoietin receptor precursor (EPOR)
- 546 Rek4 Eph-related receptor tyrosine kinase; ephrin type-A receptor 3; EphA3;
- 547 ras-related protein rab1A
- 548 fructose-16-bisphosphatase, liver
- 549 cytochrome c oxidase, subunit VIIIh
- 550 triacylglycerol lipase precursor (hepatic)
 - corticosteroid 11-beta-dehydrogenase isozyme 1 (11-DH); 11-beta-
- 551 hydroxysteroid dehydrogenase 1 (11-beta-HSD1)
- 552 squalene synthetase, hepatic
- 553 cytochrome P-450 3A9, olfactory
- 554 adenylate kinase 3
- 555 very long chain acyl-CoA dehydrogenase precursor (VLCAD)
- 556 acetylcholinesterase, T subunit, glycolipid-anchored
- 557 60S ribosomal protein L21
 - clusterin (CLU); testosterone-repressed prostate message 2 (TRPM2);
- 558 apolipoprotein J; sulfated glycoprotein 2 (SGP2); dimeric acid glycoprotein
- 559 fibroblast growth factor receptor subtype 4
- 560 EHK1; ephrin type-A receptor 5 (EPHA5); EPH-related tyrosine kinase
- 561 rab13, ras related GTPase
- 562 neuron-specific enolase (NSE); gamma enolase (EC 4.2.1.11); 2-phospho-D
- 563 glucose-6-phosphate dehydrogenase
- 564 triacylglycerol lipase precursor (pancreatic)
 - cytochrome P450 XIA1 mitochondrial precursor (CYP11A1); P450scc;
- 565 cholesterol side-chain cleavage enzyme; cholesterol desmolase
- 566 3-oxo-5-alpha-steroid 4-dehydrogenase 1 (SRD5A1); steroid 5-alpha-
- 567 cytochrome P-450 4A1
- 568 cAMP-dependent protein kinase type I-alpha regulatory chain
- 569 short chain acyl-CoA dehydrogenase precursor (SCAD; ACADS); butyryl-
- 570 NADP+ alcohol dehydrogenase; aldehyde reductase (ALR); 3-dG-reducing
- 571 60S ribosomal protein L19 (RPL19)
- 572 activator of apoptosis harakiri (HRK); neuronal death protein 5 (DP5); BID3
- 573 RET ligand 1 (RET1)
- 574 Ehk 3; ephrin type-A receptor 7; tyrosine kinase (Eph-related); EphA7
- 575 rab GDI, beta species, ras related GTPase
- 576 cytochrome c oxidase subunit Vb & VIa precursor (COX5B)
 - mitochondrial hydroxymethylglutaryl-CoA lyase precursor (HMG-CoA lyase;
- 577 HMGCL; HL); 3-hydroxy-3-methylglutaryl CoA lyase
- 578 serine phospholipid-specific phospholipase A; PS-PLA1 precursor

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

579 arachidonate 5-lipoxygenase (EC 1.13.11.34); 5-lipoxygenase (5-LO)
580 cytochrome P-450 19; aromatase
581 2-arylpromionyl-CoA epimerase; alpha-methylacyl-CoA racemase
582 DOPA decarboxylase (DDC); aromatic-L-amino-acid decarboxylase (EC
583 acyl-CoA oxidase
584 nitric oxide synthase 3
585 40S ribosomal protein S11
586 Huntington disease gene homolog
587 RET ligand 2 (RET2)
588 erbB4, proto-oncogene, neuregulin receptor
589 eek proto-oncogene, protein tyrosine kinase, eph/elk-related
590 prostaglandin D2 receptor
activin receptor type I precursor (ACVR1; ACTR1); serine/threonine-protein
591 kinase receptor R1 (SKR1); TGF-B superfamily receptor type I (TSR-I);
592 calcitonin receptor precursor (CT-R); C1A/C1B
prostaglandin E2 receptor EP2 subtype (PGE receptor EP2 subtype;
593 PTGER2); prostanoid EP2 receptor
594 5-hydroxytryptamine 2C receptor (5HT2C; 5HT1C; HTR1C); serotonin
595 neurotensin receptor type 2
596 D(1A) DOPAMINE RECEPTOR
597 gamma-aminobutyric-acid receptor delta subunit precursor (GABA(A))
598 gamma-aminobutyric acid (GABA-A) receptor, beta 1 subunit
599 acetylcholine receptor, nicotinic, alpha 4
NEUREXIN I-BETA PRECURSOR, Non-processed neurexin I-beta Synaptic
600 cell surface proteins + NEUREXIN I-ALPHA PRECURSOR, Non-processed
601 glutamate receptor, metabotropic 3
602 gastrin-releasing peptide precursor (GRP); neuromedin C
603 platelet-derived growth factor receptor, alpha
604 growth hormone receptor precursor (GH receptor; GHR); serum-binding
serotonin receptor; 5-hydroxytryptamine 6 receptor (5-HT-6); ST-B17;
605 possesses high affinity for tricyclic psychotropic drugs
606 platelet activating factor receptor
607 thyrotropin releasing hormone receptor
608 alpha 2B adrenergic receptor (ADRA2B); alpha 2B adrenoceptor
609 neuropeptide Y receptor type 1
VASOACTIVE INTESTINAL POLYPEPTIDE RECEPTOR 2 PRECURSOR
(VIP-R-2) (PITUITARY ADENYLATE CYCLASE ACTIVATING
610 POLYPEPTIDE TYPE III RECEPTOR) (PACAP TYPE III RECEPTOR)
611 GABA-A receptor rho-1 subunit precursor
612 gamma-aminobutyric acid (GABA-A) receptor, gamma 1 subunit
613 acetylcholine receptor beta
Non-processed neurexin II-beta major, NEUREXIN II-BETA-A
614 PRECURSOR + Non-processed neurexin II-alpha, NEUREXIN II-ALPHA-B
615 P2Y purinoceptor
616 transforming growth factor beta 3 (TGF-beta3); antiproliferative growth
617 c-fms proto-oncogene; macrophage colony stimulating factor 1 (MCSF-1)
618 insulin receptor precursor (INSR; IR)
619 D(2) dopamine receptor
620 vasopressin V1b receptor
621 prostaglandin E2 receptor EP4 subtype
622 alpha 2C adrenergic receptor (ADRA2C); alpha 2C adrenoceptor
623 vasopressin/arginine receptor, V1a

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- 624 c-ErbA oncogene; thyroid hormone receptor alpha-1 (THRA1)
- 625 GABA-B receptor 1a (GABA-BR1A receptor) + GABA-B receptor 1b (GABA-BR1B receptor)
- 626 gamma-aminobutyric acid receptor alpha 2 subunit precursor (GABA(A) NMDAR2B; GLUTAMATE (NMDA) RECEPTOR SUBUNIT EPSILON 2)
- 627 PRECURSOR (N-METHYL D-ASPARTATE RECEPTOR SUBTYPE 2B)
- 628 INOSITOL TRIPHOSPHATE RECEPTOR SUBTYPE 3
- 629 P2Y PURINOCEPTOR 6 (P2Y6)
- 630 leukemia inhibitory/cholinergic neuronal differentiation factor (LIF/DIF)
- 631 endothelin 1 receptor precursor; ETA; EDNRA
- 632 leptin receptor precursor (LEPR); OB receptor (OBR); FA
- 633 D(4) dopamine receptor; D(2C) dopamine receptor
- 634 prostaglandin F2 alpha receptor
- 635 growth hormone secretagogue receptor 1 (GHSR)
- 636 cholecystokinin receptor
- 637 vasopressin V2 receptor
- 638 RXR-beta cis-11-retinoic acid receptor; nuclear receptor co-regulator 1
- 639 glutamate receptor 1 precursor (GluR-1); GluR-A; GluR-K1
- 640 gamma-aminobutyric acid receptor alpha 3 subunit precursor (GABA(A) NMDAR2A N-METHYL-D-ASPARTATE RECEPTOR SUBUNIT)
- 641 NMDAR2A N-METHYL-D-ASPARTATE RECEPTOR SUBUNIT
- 642 inositol triphosphate receptor, type 2 (ITPR2)
- 643 P2U PURINOCEPTOR 1 (ATP RECEPTOR) (P2U1) (PURINERGIC)
- 644 tumor necrosis factor alpha precursor (TNF-alpha; TNFA); cachectin
- 645 LCR-1; putative chemokine and HIV coreceptor homolog; G protein-coupled
- 646 estrogen receptor beta (ER-beta); ESR2; NR3A2
- 647 kappa-type opioid receptor (KOR-1)
- 648 lutropin-choriogonadotrophic hormone receptor
- 649 beta 1 adrenergic receptor (ADRB1R)
- 650 5-hydroxytryptamine (serotonin) receptor 1B; 5-HT1B
- 651 adrenergic receptor, beta 2
- 652 thyroid hormone beta receptor; c-erbA-beta
- 653 ionotropic kainate 3 glutamate receptor precursor (GRIK3); glutamate
- 654 gamma-aminobutyric acid (GABA-A) receptor, beta 3 subunit
- 655 muscarinic acetylcholine receptor M3 (MACHR)
- 656 PKC-eta; protein kinase C eta type
- 657 neuropilin 2
- 658 glial cell line-derived neurotrophic factor precursor
- 659 C5a anaphylatoxin chemotactic receptor (C5AR; C5R1)
- 660 B1 bradikinin receptor
- 661 mu opioid receptor (MUOR1); mu-type opioid receptor (MOR-1); opioid
- 662 serotonin 5HT2 receptor
 - prostagladin E2 receptor EP3 subtype (PGE receptor EP3 subtype; PTGER3); prostanoid EP3 receptor
- 664 somatostatin receptor 2
- 665 5-hydroxytryptamine (serotonin) receptor 5B; 5HT5b
- 666 mineralocorticoid receptor (MR)
- 667 neuronal acetylcholine receptor protein beta 2 subunit precursor (non-alpha)
- 668 gamma-aminobutyric acid (GABA-A) receptor, gamma 3 subunit
- 669 muscarinic acetylcholine receptor M2
- 670 coagulation factor II (thrombin) receptor (CF2R); thrombin receptor
 - heat-stable enterotoxin receptor precursor; intestinal guanylate cyclase
- 671 (GUCY2C; GUC2C); STA receptor
- 672 VGF8A protein precursor

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- 673 endothelin receptor ET-B
- 674 angiotensin/vasopressin receptor (AI/AVP)
- 675 substance P receptor (SPR); tachykinin receptor; NK-1 receptor (NK-1R)
- 676 thyroid stimulating hormone receptor
- 677 type 2 angiotensin II receptor (AGTR2; AT2)
- 678 opioid receptor-like orphan receptor
- 679 vasoactive intestinal peptide 1 receptor
- 680 glucocorticoid receptor
- 681 glutamate receptor 2 precursor (GLUR-2; GLUR-B; GLUR-K2)
- 682 gamma-aminobutyric acid receptor alpha 4 subunit precursor (GABA(A))
- 683 muscarinic acetylcholine receptor M4 (CHRM4)
 - metabotropic glutamate receptor kinase (MGLUR1; G-protein coupled);
- 684 metabotropic glutamate receptor 1 precursor
- 685 very low-density lipoprotein receptor precursor (VLDL receptor)
- 686 glia maturation factor beta (GMF-beta; GMFB)
- 687 G-protein coupled receptor, putative, GPR41
- 688 atrial natriuretic peptide clearance receptor precursor (ANP-C; ANPRC);
 - brain cholecystokinin/gastrin receptor; gastrin/cholecystokinin type B
- 689 receptor; CCK-B receptor (CCK-BR)
- 690 gonadotropin releasing hormone receptor
- 691 thromboxane A2 receptor (TBXA2R; TXR2); prostanoid TP receptor
- 692 melatonin receptor
- 693 glucagon-like peptide 1 receptor; GLP-1 receptor
- 694 vitamin D3 receptor (VDR); 1,25-dihydroxyvitamin D-3 receptor; NR1I1
- 695 glutamate receptor 3 precursor (GLUR-3; GLUR-C; GLUR-K3)
- 696 gamma-aminobutyric acid receptor alpha 5 subunit precursor (GABA(A))
- 697 muscarinic acetylcholine receptor M5 (CHRM5)
- 698 glutamate metabotropic receptor 8 (MGLUR8)
- 699 low-density lipoprotein receptor precursor (LDL receptor; LDLR)
- 700 beta-nerve growth factor precursor (beta-NGF)
- 701 interleukin-2 receptor beta chain
- 702 insulin receptor 1
- 703 delta-type opioid receptor (DOR-1); opioid receptor A
- 704 somatostatin receptor
- 705 alpha 1B adrenergic receptor; alpha 1B-adrenoceptor (ADRA1B)
- 706 5-hydroxytryptamine (serotonin) receptor 4; 5-HT4L
- 707 galanin receptor 1
- 708 retinoid X receptor alpha (RXR alpha; RXRA); NR2B1
- 709 glutamate receptor 4 precursor (GLUR-4; GLUR-D)
- 710 gamma-aminobutyric acid receptor alpha 6 subunit precursor (GABA(A))
- 711 glycine receptor (GlyR) alpha-1 chain precursor (48 kDa); strychnine binding
- 712 metabotropic glutamate receptor 6 precursor
- 713 asialoglycoprotein receptor R2/3 (ASGPR); hepatic lectin 2/3; RHL-2
- 714 granulocyte colony stimulating factor
- 715 interleukin-4 receptor
- 716 somatostatin receptor 1 (SS1R; SSTR1); SRIF-2
- 717 substance K receptor (SKR); neurokinin A receptor; NK-2 receptor
- 718 calcium-independent alpha-latrotoxin receptor
- 719 prostaglandin E2 receptor EP1 subtype (PGE receptor EP1; PTGER1);
- 720 neuromedin B receptor
- 721 melatonin-related receptor
- 722 thyroid hormone receptor ErbA-beta-2, pituitary specific

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

gastric inhibitory polypeptide receptor precursor (GIP-R); glucose-
723 dependent insulinotropic polypeptide receptor
724 gamma-aminobutyric acid (GABA-A) receptor, pi subunit
725 transmembrane receptor UNC5H1.
726 glutamate metabotropic receptor 2 (mGluR2)
protachykinin alpha precursor (alpha-PPT); substance P + protachykinin
beta precursor (beta-PPT); substance P; neurokinin A; substance K;
727 neuromedin L; neuropeptide K + protachykinin gamma precursor; substance
728 granulocyte-macrophage colony-stimulating factor (GM-CSF); colony-
729 interleukin-1 receptor type I (IL-1R-1); P80
730 cholecystokinin
731 gastrin-releasing peptide receptor (GRP-R); GRP-preferring bombesin
732 alpha 1C -adrenergic receptor
733 somatostatin receptor 5 (SSTR5; SS5R)
734 cannabinoid receptor 1, neuronal
735 neuropeptide Y5 receptor
736 androgen receptor
737 GABA-A receptor beta-2 subunit precursor
738 gamma-aminobutyric acid (GABA-A) receptor, rho 2
739 transmembrane receptor UNC5H2.
740 metabotropic glutamate receptor 5 precursor (MGLUR5; GRM5)
nociceptin precursor; orphanin FQ; PPNO; ORL1 receptor agonist
741 precursor; endogenous agonist of opioid receptor-like ORL1 receptor
742 macrophage inflammatory protein-2 precursor
743 fos-responsive related to IL-1 receptor Fit-1M
glycerol kinase (GK); glycerokinase; ATP:glycerol 3-phosphotransferase;
744 ATP-stimulated glucocorticoid-receptor translocation promoter (ASTP)
745 neuromedin K receptor (NKR); neurokinin B receptor; NK-3 receptor (NK-
746 corticotropin-releasing factor receptor subtype 2 (CRF2R)
747 5-hydroxytryptamine 1F receptor (5HT1F; HTR1F); serotonin receptor
748 pancreatic polypeptide receptor PP1
749 melanocortin receptor 4
Nur77 early response protein; NGF-I; nerve growth factor induced protein I-
750 B (NGFI-B); nuclear receptor
751 GABA-A receptor gamma-2 subunit precursor
752 glutamate receptor, ionotropic, kainate 5
753 glycine receptor, alpha 2A subunit, inhibitory
754 G protein-coupled receptor 27; gustatory receptor 27 (GUST27)
755 neuropeptide Y precursor (NPY)
756 fibroblast growth factor 10 precursor (FGF10)
757 interleukin 8 receptor
758 guanylyl cyclase (membrane form)
alpha-1D adrenergic receptor (ADRA1D); alpha 1D-adrenoceptor; alpha-1A
759 adrenergic receptor (ADRA1A); RA42
760 parathyroid hormone receptor PTH2
761 5-hydroxytryptamine 5A receptor (5HT5A; HTR5A); serotonin receptor;
762 galanin receptor 2
763 somatostatin receptor 3
764 NOR-1; member of thyroid/steroid receptor superfamily
glutamate [NMDA] receptor subunit epsilon 3 precursor; N-methyl-D-
765 aspartate receptor subunit 2C (NMDAR2C; NR2C); GRIN2C
766 acetylcholine receptor alpha

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

767 NEURONAL PENTRAXIN RECEPTOR
768 metabotropic glutamate receptor 7 precursor (GRM7; MGLUR7)
769 NEUROKININ B PRECURSOR (NEUROMEDIN K)
770 platelet-derived growth factor A-chain (PDGF-A)
771 galanin precursor (GALN; GAL)
772 activin type receptor
773 glucagon receptor precursor (GL-R)
774 follicle stimulating hormone receptor
775 parathyroid hormone/parathyroid hormone-related receptor 1 (PTH/PTHR)
776 secretin receptor
777 5-hydroxytryptamine (serotonin) receptor 2B
778 N-methyl-D-aspartate receptor (NMDAR1); glutamate receptor subunit zeta
779 gamma-aminobutyric acid receptor alpha 1 subunit precursor (GABA(A))
780 acetylcholine receptor, nicotinic, epsilon, muscle
781 neuropilin
782 glutamate receptor, metabotropic 4
783 NEUROMEDIN U-23 PRECURSOR (NMU-23)
784 trombopoietin
785 insulin like growth factor II (IGF-II)
786 neurotrophin 5, trk and trkb activating
787 inhibin alpha chain precursor
788 natriuretic peptide precursor, gamma, atrial
789 interleukin-2 (IL-2)
790 corticotropin-releasing factor binding protein
791 arrestin D + guanine aminohydrolase (GAH)
extracellular signal-regulated kinase 1 (ERK1); mitogen-activated protein
kinase 1 (MAP kinase 1; MAPK1); insulin- stimulated microtubule-
792 associated protein-2 kinase; MNK1; PRKM3; ERT2; p44-MAPK
793 protein kinase C gamma type (PKC-gamma)
794 rhodopsin kinase
795 serine/threonine kinase PCTAIRE3 (PCTK3)
796 protein phosphatase 2C alpha (PP2C alpha; PP2C1); protein phosphatase
797 Ral B; GTP-binding protein
798 guanine nucleotide-binding regulatory , alpha subunit
799 heparin-binding growth associated protein
800 bone morphogenetic protein 3
801 thyroliberin precursor; thyrotropin-releasing hormone precursor (TRH)
802 thyroid stimulating hormone, beta
803 interleukin 6 (IL-6)
804 chromogranin A
805 G protein-coupled receptor kinase 5 (GRK5)
extracellular signal-regulated kinase 2 (ERK2); mitogen-activated protein
806 kinase 2 (MAP kinase 2; MAPK2); p42-MAPK; ERT1
807 protein kinase C zeta type (PKC-zeta)
808 Casein kinase II (alpha subunit)
809 Pyruvate dehydrogenase kinase kinase precursor
serine/threonine protein phosphatase 2B catalytic subunit beta; calmodulin-
810 dependent calcineurin A subunit beta; CAM-PRP catalytic subunit; PPP3CB
811 GTP-binding protein G(i)/G(s)/G(o) gamma-9 subunit; Ggamma8
812 Ras-related GTPase, ARF-like 1
813 insulin like growth factor I (IGF-I)
814 transforming growth factor, beta 1

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- 815 follicle stimulating hormone beta-subunit
- 816 vasoactive intestinal peptide
- 817 interleukin-7 (IL-7)
- 818 NEUREXOPHILIN 1 (NEUROPHILIN)
- 819 c-src-kinase (CSK) & negative regulator; tyrosine-protein kinase
extracellular signal-regulated kinase 3 (ERK3); mitogen-activated protein
- 820 kinase 3 (MAP kinase 3; MAPK3); p55-MAPK
- 821 PKN cell morphology-related protein kinase; homologous to PKC
- 822 Ctk; non-receptor protein tyrosine kinase (batk)
- 823 HEP; LC-PTP protein-tyrosine phosphatase; hematopoietic protein-tyrosine
- 824 protein phosphatase 2A, regulatory subunit B
- 825 transducin beta-1 subunit; GTP-binding protein G(i)/G(s)/G(t) beta subunit 1
GTP-binding protein (G-alpha-8), GUANINE NUCLEOTIDE-BINDING
- 826 PROTEIN G(S), ALPHA SUBUNIT (ADENYLYLATE CYCLASE-
- 827 vascular endothelial growth factor D (VEGF-D)
- 828 growth factor, schwannoma-derived
- 829 placental lactogen
- 830 preprolactin (Prl)
- 831 interleukin-10 (IL-10)
- 832 early growth response protein 1 (EGR1); nerve growth factor-induced
- 833 Hck tyrosine-protein kinase; p56-hck; hemopoietic cell kinase
- 834 LIM domain serine/threonine kinase 1 (LIMK-1)
- 835 calcium/calmodulin-dependent protein kinase type IV (CAMK IV; catalytic
- 836 Rsk; ribosomal protein S6 kinase
- 837 Cot proto-oncogene; Tpl-2
- 838 protein tyrosine phosphatase, striatum enriched
- 839 transducin beta-2 subunit; GTP-binding protein G(i)/G(s)/G(t) beta subunit 2
- 840 ras-related protein Rab2
- 841 macrophage migration inhibitory factor (MIF)
- 842 keratinocyte growth factor
- 843 prolactin like protein A (rPLP-A)
- 844 gonadotrophin-releasing hormone precursor
- 845 interleukin 13 precursor (IL-13); T-cell activation protein P600
- 846 gastric inhibitory polypeptide precursor (GIP; glucose-dependent
- 847 spleen tyrosine kinase (SYK)
- 848 LIM domain kinase 2 (LIMK2)
- 849 cell adhesion kinase beta (CAK beta); calcium-dependent; FAK family
- 850 GSK-3 alpha; glycogen synthase kinase-3 alpha;
- 851 cyclin-dependent kinase 4 (CDK4); cell division protein kinase 4; PSK-J3
- 852 protein tyrosine phosphatase 2E1
- 853 guanine nucleotide-binding protein G(i)/G(s)/G(t) beta subunit 3 (GNB3);
- 854 Rab-3a ras-related protein
- 855 CXC chemokine LIX
- 856 cytokine-induced neutrophil chemoattractant 2, beta
- 857 somatostatin
- 858 corticotropin-releasing hormone
- 859 interleukin-15 (IL-15)
- 860 Transforming growth factor beta (TGF-beta) masking protein large subunit
- 861 Lyn tyrosine-protein kinase
- 862 mitogen-activated protein kinase p38 (MAP kinase p38); CSBP2
- 863 G protein beta-adrenergic receptor kinase 1 (beta-ARK1; EC 2.7.1.126)
- 864 CamK II; calcium/calmodulin-dependent protein kinase brain type II beta

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

865 cyclin-dependent kinase 5 (CDK5); tau protein kinase II (TPKII) catalytic
866 protein tyrosine phosphatase PTPase
867 ras-related protein m-ras
868 Rab-4a ras-related protein
869 erythropoietin precursor (EPO)
870 heparin-binding growth factor 1
 somatoliberin precursor; growth hormone-releasing factor (GRF); growth
871 hormone-releasing hormone (GHRH).
872 inhibin, beta A subunit
873 insulin-like growth factor binding protein 2 (IGF-binding protein 2; IGFBP2;
874 F-SPONDIN PRECURSOR; secreted protein; promotes neural cell adhesion
875 cAMP-dependent protein kinase catalytic subunit
 dual-specificity mitogen-activated protein kinase kinase 1 (MAP kinase
876 kinase 1; MAPK1; extracellular signal-regulated kinase activator kinase 1
877 G protein beta-adrenergic receptor kinase 2 (beta-ARK2; EC 2.7.1.126)
878 CamK I; calcium/calmodulin-dependent protein kinase type I + CaM-like
879 cell division control protein 2 homolog (CDC2); cyclin-dependent kinase 1
880 protein phosphatase 2C isoform; Mg²⁺ dependent protein phosphatase beta
881 ras associated with diabetes (RAD1)
882 Rab-3b ras-related protein
883 glia-activating factor precursor (GAF); fibroblast growth factor 9 (FGF9);
884 bone morphogenetic protein 4
 muscle 6-phosphofructokinase (PFKM); phosphofructokinase 1;
885 phosphohexokinase; phosphofructo-1-kinase A
886 gastrin
887 leptin precursor; obesity factor
888 secretogranin 3 (Sg3)
889 PKR; double-stranded RNA-activated eIF-2a kinase
 dual-specificity mitogen-activated protein kinase kinase 2 (MAP kinase
890 kinase 2; MAPKK2; extracellular signal-regulated kinase activator kinase 2
 calcium/calmodulin-dependent protein kinase type II delta subunit (CAM-
891 kinase II delta; CAMK-II delta; CAMK2D)
892 serum/glucocorticoid-regulated serine/threonine protein kinase (SGK)
893 wee1 tyrosine kinase
894 protein tyrosine phosphatase PTP-S
 GTP-binding protein; G-alpha-i3; guanine nucleotide-binding protein G(K)
895 alpha subunit (G(I) alpha-3)
896 Rab-11A; Ras p21-like small GTP-binding protein; 24KG; YL8
897 fibroblast growth factor 5 (FGF5); HBGF5
898 bone morphogenetic protein 2
899 thymosin beta-like protein
900 calcitonin
901 insulin-like growth factor binding protein 1 precursor (IGFBP-1; IBP-1)
902 Grb2; Ash-m; growth factor receptor-bound protein 2; adaptor protein; sos-
903 Janus tyrosine protein kinase 1 (JAK1)
 dual-specificity mitogen-activated protein kinase kinase 5 (MAP kinase
904 kinase 5; MAPKK5; extracellular signal-regulated kinase activator kinase 5
905 phosphorylase kinase, catalytic subunit
906 MRK; serine/threonine kinase, possibly involved in cardiac development
907 PCTAIRE1; cdc2-related serine/threonine kinase
908 R-PTP-A; receptor protein-tyrosine phosphatase alpha

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

guanine nucleotide-binding protein G(I) alpha 2 subunit (GNAI2); adenylate
909 cyclase-inhibiting G alpha protein
910 rab12, ras related GTPase
911 hepatocyte growth factor precursor (HGF); scatter factor (SF); hepatopoeitin
912 Glioma-derived vascular endothelial cell growth factor
913 presomatotropin
914 interferon, alpha 1
915 insulin-like growth factor binding protein 3 precursor (IGFBP-3; IBP-3)
916 beta-arrestin 1
917 Jak2 tyrosine-protein kinase; Janus kinase 2
918 protein kinase C alpha type (PKC-alpha)
919 insulin receptor-related receptor-alpha (sIRR-1)
920 Casein kinase I delta; CKId; 49-kDa isoform
921 G protein-coupled receptor kinase 4 (GRK4)
Protein tyrosine phosphatase (OST-PTP) associated with bone and
testicular differentiation receptor-type, OSTEOTESTICULAR PROTEIN
922 TYROSINE PHOSPHATASE PRECURSOR (EC 3.1.3.48)
923 guanine nucleotide-binding protein beta subunit 5 (GNB5); transducin beta
924 rab15, ras related GTPase
heparin-binding epidermal growth factor-like growth factor precursor
925 (heparin-binding EGF-like growth factor; HBEGF; HEGFL); DTR
small inducible cytokine A3 precursor (SCYA3); macrophage inflammatory
926 protein 1 alpha precursor (MIP1-alpha; MIP1A)
927 C-type natriuretic peptide precursor (CNP; NPPC)
928 Interferon gamma precursor (IFN-gamma; IFNG)
929 endothelin-1 precursor (ET-1)
930 beta-arrestin 2 (ARRB2)
931 Jak3 tyrosine-protein kinase; Janus kinase 3
932 protein kinase C beta-I type (PKC-beta I) + protein kinase C beta-II type
933 phosphorylase kinase, alpha subunit
Calcium/calmodulin-dependent protein kinase kinase; phosphorylase B
934 kinase kinase; glycogen synthase A kinase; hydroxyalkyl-protein kinase
935 Syp; SH-PTP2; adaptor protein tyrosine phosphatase
Purkinje cells-specific protein tyrosine phosphatase CBPTP, TYROSINE
936 PHOSPHATASE CBPTP (EC 3.1.3.48)
937 guanine nucleotide-binding protein G(I)/G(S)/G(O) gamma-7 subunit
938 rab14, ras related GTPase
heparin-binding growth factor 2 precursor (HBGF2); basic fibroblast growth
939 factor (BFGF); fibroblast growth factor 2 (FGF2); prostatropin
940 CC chemokine MIP3 alpha exodus
941 peptide YY precursor (PYY)
942 Interferon gamma inducing factor precursor
943 insulin-like growth factor-binding protein (rIGFBP-6)
944 arrestin C
945 c-Jun N-terminal kinase 1 (JNK1); stress-activated protein kinase gamma
946 protein kinase C delta type (PKC-delta)
947 casein kinase 1, gamma subunit, isoform 1
948 Mak; male germ cell-associated kinase; highly expressed at and after
949 serine/threonine protein phosphatase 2A-beta catalytic subunit (PP2A-beta;
950 phosphatase 2A, catalytic subunit, isotype alpha
951 guanine nucleotide-binding protein G(O) alpha subunit (GNAO; GNA0)
952 rab16, ras related GTPase

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953 neurotrophin 3 precursor (NTF3); neurotrophic factor; HDNF; nerve growth
954 Fasl; Fas antigen ligand; generalized lymphoproliferation disease gene
955 melanin-concentrating hormone precursor (PMCH; MCH)
956 interleukin 1 alpha (IL-1 alpha; IL1A)
957 insulin-like growth factor-binding protein 5 precursor (IGF-binding protein 5;
958 prostaglandin F2 receptor, alpha isoform, regulatory protein
959 c-Jun N-terminal kinase 2 (JNK2); stress-activated protein kinase alpha
960 focal adhesion protein-tyrosine kinase (FAK)
961 phosphorylase kinase, gamma subunit
962 PAK-alpha serine/threonine kinase; p21-Cdc42/Rac1 activated kinase; p68-
963 protein phosphatase 2A-beta regulatory subunit B (55 kDa); beta-PR55
964 Rab-related GTP-binding protein
guanine nucleotide-binding protein G(I) alpha 1 subunit (GNAI1); adenylate
965 cyclase-inhibiting G alpha protein
966 G protein, gamma 5 subunit
967 BTG2 protein precursor; NGF-inducible anti-proliferative protein PC3
968 brain natriuretic peptide (BNP); 5-kDa cardiac natriuretic peptide; ISO-ANP
969 luteinizing hormone, alpha
970 interleukin 1, beta
971 cocaine/amphetamine-induced rat transcript, CART
972 protein arginine N-methyltransferase 1
973 c-Jun N-terminal kinase 3 (JNK3); stress-activated protein kinase beta
974 protein kinase C epsilon type (PKC-epsilon)
975 protein kinase II, alpha subunit, calcium/calmodulin dependent
976 serine/threonine kinase PCTAIRE2 (PCTK2)
977 nuclear tyrosine phosphatase; PRL-1; affects cell growth
978 Ral A; GTP-binding protein
979 Ras-related GTPase, ARF-like 5
980 rab26, ras related GTPase
981 rab4B, ras related GTPase
calcium-dependent phospholipase A2 precursor (PLA2);
982 phosphatidylcholine 2-acylhydrolase (PLA2-10; PLA2G5)
983 adenylyl cyclase 4
NVP-2; neural visinin-like Ca2+-binding protein, VISININ-LIKE PROTEIN 2
984 (VILIP-2) (NEURAL VISININ-LIKE PROTEIN 2) (NVL-2) (NVP-2).
985 Crk-associated substrate (Cas); focal adhesion kinase substrate; p130
986 ADP-ribosylation factor 5 (ARF5)
trypsinogen II (anionic precursor; EC 3.4.21.4); pretrypsinogen II +
987 trypsinogen I (anionic precursor; EC 3.4.21.4); pretrypsinogen I
988 mast cell protease 7 precursor (RMCP-7)
989 gelatinase A
proteasome iota subunit; macropain iota subunit; multicatalytic
990 endopeptidase complex iota subunit; 27-kDa prosomal protein (PROS27);
991 tissue inhibitor of metalloproteinase 2 (TIMP2)
992 leukocyte common antigen-related tyrosine phosphatase (LAR)
993 G protein coupled receptor, putative, GPR6
994 calponin
995 Ras-GRF (p140); sos; guanine nucleotide release/exchange factor (GNRP)
14-kDa phospholipase A2 precursor (PLA2); phosphatidylcholine 2-
996 acylhydrolase (PLA2-8; PLA2G2C)
adenylyl cyclase type VIII (ADCY8); ATP pyrophosphate lyase;
997 Ca2+/calmodulin-activated adenylyl cyclase

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

NVP-3; neural visinin-like Ca2+-binding protein, VISININ-LIKE PROTEIN 3
998 (VILIP-3) (NEURAL VISININ-LIKE PROTEIN 3) (NVL-3) (NVP-3).
phosphatidylinositol 3-kinase regulatory alpha subunit (PI13-kinase p85-
999 alpha subunit; PTDINS-3-kinase p85-alpha; PI3K)
1000 ADP-ribosylation factor 6 (ARF6)
neuroendocrine convertase 1 precursor (NEC 1); prohormone convertase 1
1001 (PC1); proprotein convertase 1
1002 mast cell protease-3 precursor
1003 insulin-regulated membrane aminopeptidase vp165
1004 proteasome subunit R-zeta
1005 alpha-1-antiproteinase precursor; alpha-1-proteinase inhibitor; alpha-1
1006 phosphotyrosine phosphatase 6
1007 G protein coupled receptor, putative, GPR12
1008 plakoglobin
1009 guanine nucleotide-binding protein alpha 12 subunit (G alpha 12; GNA12)
1010 interferon inducible protein 10
1011 olfactory guanylyl cyclase D precursor (GUCY2D)
serine/threonine protein phosphatase 2B catalytic subunit alpha; calcineurin
1012 A subunit alpha (CALNA); CAM-PRP catalytic subunit; PPP3CA
1013 myristoylated alanine-rich C-kinase substrate (MARCKS; MACS)
14-3-3 protein beta/alpha; protein kinase C inhibitor protein-1; prepronerve
1014 growth factor RNH-1; KCIP-1; YWHAB
1015 urokinase-type plasminogen activator precursor (UPA); U-plasminogen
1016 cathepsin D
dipeptidyl-peptidase I precursor (EC 3.4.14.1; DPP-I); cathepsin C;
1017 cathepsin J; dipeptidyl transferase
1018 proteasome activator rPA28 subunit alpha
pancreatic secretory trypsin inhibitor I precursor (PSTI-I); cholecystokinin-
releasing peptide; monitor peptide + pancreatic secretory trypsin inhibitor II
1019 precursor (PSTI-II); caltrin; calcium transport inhibitor
1020 Receptor-linked protein tyrosine phosphatase (PTP-PS)
1021 G protein coupled receptor 19
1022 DNA topoisomerase II alpha (TOP2A)
1023 RhoGAP; p122
1024 inositol 1,4,5-triphosphate 3-kinase receptor 2 (INSP3R)
1025 DPDE1; cAMP-dependent 3',5'-cyclic phosphodiesterase 4C
1026 cAMP-dependent protein kinase type II-beta regulatory chain
1027 presenilin 2 (PSEN2; PSNL2; PS2); homolog of the Alzheimer's disease
1028 protein kinase C-binding protein nel homolog 1
1029 dipeptidyl aminopeptidase related protein (DPP6)
1030 renin
1031 cathepsin K
1032 proteasome subunit RC10-II
1033 mettaloproteinase inhibitor 3 precursor; tissue Inhibitor of metalloproteinase
Tyrosine phosphatase-like protein; negative regulator of PTPases in
neuronal tissues, RAT PHEOCHROMOCYTOMA-DERIVED PROTEIN
1034 TYROSINE PHOSPHATASE-LIKE PROTEIN (EC 3.1.3.48)
1035 G protein coupled receptor, putative, GPR10
1036 telomerase protein component 1 (TLP1)
1037 RalGDSB; GTP/GDP dissociation stimulator for a ras-related GTPase
1038 inositol 1,4,5-triphosphate 3-kinase receptor 1
1039 DPDE4; cAMP-dependent 3',5'-cyclic phosphodiesterase 4B

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

14-3-3 protein zeta/delta; PKC inhibitor protein-1; KCIP-1; mitochondrial
1040 import stimulation factor S1 subunit
1041 presenilin 1 (PSNL1; PSEN1; PS1); S182 protein
1042 protein kinase C-binding protein nel homolog 2
1043 mast cell protease 4 precursor (RMCP-4)
1044 angiotensin converting enzyme (ACE; somatic; dipeptidyl carboxypeptidase
1045 cathepsin H
1046 proteasome subunit RC7-1
1047 tissue carboxypeptidase inhibitor (TCI)
1048 adenosine A3 receptor (ADORA3); TGPCR1
1049 probable G protein-coupled receptor RTA
1050 apurinic/apyrimidinic endonuclease (AP endonuclease; APEX; APEN)
1051 Rgs4; regulator of G-protein signaling 4 (RGP4).
1052 PI4-K; phosphatidylinositol 4-kinase (92/100 kDa, soluble)
1053 Adenyl cyclase type II
1054 PKI-alpha; cAMP-dependent protein kinase inhibitor (muscle/brain form)
neuromodulin; axonal membrane protein GAP43; PP46; B-50; protein F1;
1055 calmodulin-binding protein P-57
1056 GAP-associated protein (p190).
1057 mast cell protease 6 precursor (RMCP-6)
matrilysin precursor; PUMP-1 protease; uterine metalloproteinase; matrix
1058 metalloproteinase 7 (MMP7); matrin
1059 cathepsin S precursor (CTSS)
26S protease regulatory subunit 8; SUG1; p45/SUG; TAT-binding protein
1060 homolog 10 (TBP10); PSMC5
1061 plasma proteinase inhibitor alpha-1-inhibitor III
1062 adenosine A1 receptor (ADORA1)
1063 orphan nuclear receptor TR4; NR2C2
1064 MLH1 DNA mismatch repair protein
1065 RIN1; interacts directly with Ras and competes with Raf1
1066 PI4-K; phosphatidylinositol 4-kinase (230 kDa)
1067 Adenyl cyclase (olfactive type) type III
1068 PKI-beta; cAMP-dependent protein kinase inhibitor (testis form)
1069 SHPS-1 receptor-like protein with SH2 binding site
1070 phospholipase A-2-activating protein (PLAP)
mast cell protease 8 precursor (RMCP-8) + mast cell protease 9 precursor
1071 (RMCP-9) + mast cell protease 10 precursor (RMCP-10)
1072 carboxypeptidase E; carboxipeptidase H
1073 cathepsin L
26S protease regulatory subunit 7 (P26S7); MSS1; PSMC2 (or 26S
1074 protease regulatory subunit 6B (P26S6B); TAT-binding protein 7 (TBP7);
1075 plasminogen activator inhibitor -1 (PAI-1)
1076 adenosine A2A receptor (ADORA2A)
1077 ovalbumin upstream promoter gamma nuclear receptor rCOUPg
O-6-methylguanine-DNA methyltransferase (MGMT); methylated-DNA-
1078 protein-cysteine methyltransferase
1079 phospholipase C gamma 1 9PLC gamma-1); PLC-II; PLC-148
1080 phospholipase C beta 3 (PLC-beta 3)
1081 Adenyl cyclase type V
1082 14-3-3 protein gamma subtype; putative protein kinase C regulatory protein
1083 chloride channel RCL1
1084 nitric oxide synthase 1

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- 1085 tissue-type plasminogen activator (t-PA)
- 1086 aminopeptidase B
- 1087 cathepsin B
 - 26S protease regulatory subunit 6B (P26S6B); TAT-binding protein 7
- 1088 (TBP7); PSMC4 (or 26S protease regulatory subunit 7 (P26S7); MSS1)
- 1089 calpastatin
- 1090 adenosine A2B receptor (ADORA2B)
- 1091 Ear-3; V-erbA related protein; COUP-TFI transcription factor
- 1092 replication protein A 32-kDa subunit (RPA); replication factor-A protein 2
- 1093 phospholipase C gamma 2 (PLC gamma-2); PLC-IV
- 1094 phospholipase C beta 1 (PLC beta 1); PLC-I; PLC-154
- 1095 calcineurin B-like protein (CBLP) + calcium-binding polypeptide
- 1096 14-3-3 protein eta; PKC inhibitor protein-1; KCIP-1
- 1097 frizzled-1 (FZ-1); Drosophila tissue polarity gene frizzled homolog ;
- 1098 carboxypeptidase D precursor (CPD)
 - dipeptidyl peptidase IV (DPPIV ; DPP4); bile canaliculus domain-specific
- 1099 membrane glycoprotein; gp110 glycoprotein
- 1100 membrane-type matrix metalloproteinase MT3-MMP
 - apopain precursor; CPP32 cysteine protease; caspase-3 (CASP3);
- 1101 interleukin-1 beta converting enzyme-like protein (LICE); YAMA protein;
- 1102 26S protease regulatory subunit 4 (P26S4); PSMC1
- 1103 plasminogen activator inhibitor 2A
- 1104 extracellular calcium-sensing receptor precursor (CASR); parathyroid cell
 - 1D-myo-inositol-trisphosphate 3-kinase A (ITPKA); inositol 1,4,5-
- 1105 triphosphate 3-kinase (IP3 3-kinase; IP3K)
 - structure-specific recognition protein 1 (SSRP1); recombination signal
- 1106 sequence recognition protein; T160; CIIDBP
- 1107 phospholipase C delta 1 (PLC delta-1); PLC-III
- 1108 Ca2+-independent phospholipase A2
 - calbindin D28; avian- type vitamin D-dependent calcium-binding protein
- 1109 (CABP); spot 35 protein; CALB1
- 1110 14-3-3 protein theta; 14-3-3 protein tau
- 1111 PDGF-associated protein
- 1112 dipeptidase (DPEP1)
- 1113 prohormone convertase 2
- 1114 kidney aminopeptidase M (APM)
 - caspase-1 (CASP3); interleukin-1 beta convertase precursor (IL-1BC); IL-1
- 1115 beta converting enzyme (ICE)
 - proteasome beta subunit precursor; macropain beta; multicatalytic
- 1116 endopeptidase complex beta; proteasome chain 3; RN3; PSMB4
- 1117 type I procollagen C proteinase enhancer protein
- 1118 B2 bradykinin receptor (BK2 receptor; BDKRB2)
- 1119 ezrin; cytovillin; villin 2 (VIL2); p81
- 1120 neuronatin
- 1121 FKBP-rapamycin-associated protein (FRAP); rapamycin target protein
- 1122 cAMP phosphodiesterase 4A; DPDE2; dunce Drosophila homolog E2
- 1123 calretinin
 - 14-3-3 protein epsilon; PKC inhibitor protein-1; KCIP-1; mitochondrial import
- 1124 stimulation factor L subunit
- 1125 ADP-ribosylation factor 1 (ARF1)
- 1126 tripeptidylpeptidase II
- 1127 thrombin

Fig. 9 provides the gene names for the gene numbers referenced in Fig. 8.

- 1128 metalloendopeptidase meprin beta subunit
- 1129 proteasome component C2
- 1130 ATPase, proteasomal, liver, TBP1
 - thimet oligopeptidase (THOP1); endo-oligopeptidase A; endopeptidase
- 1131 24.15; PZ-peptidase; soluble metalloendopeptidase
- 1132 lysosphingolipid, G protein-coupled receptor
- 1133 plectin
- 1134 Sca1; spinocerebellar atrophy type 1
- 1135 phospholipase C delta4
- 1136 cAMP-dependent 3',5'-cyclic phosphodiesterase; hormone-sensitive
Calcineurin B subunit, CALCINEURIN B SUBUNIT ISOFORM 1 (PROTEIN
- 1137 PHOSPHATASE 2B REGULATORY SUBUNIT).
LERK-2; EPLG2; Eph-related receptor tyrosine kinase ligand 2; ephrin-B1
- 1138 precursor; Elk ligand precursor; Elk-L
- 1139 ADP-ribosylation factor 2
- 1140 neuroendocrine protein 7B2 precursor; secretogranin V; SGNE1
- 1141 trypsinogen 4
- 1142 endothelin converting enzyme
- 1143 proteasome component C3
- 1144 proteasome subunit C5
- 1145 Cak tyrosine-protein kinase; EDDR1; Trk-E; Ptk-3; discoidin receptor
- 1146 proteinase activated receptor 2 precursor (PAR-2)
- 1147 growth factor; Arc
- 1148 fibroblast growth factor receptor-activating protein 1 (FGF receptor-
- 1149 inositol polyphosphate 5' phosphatase SHIP
- 1150 DPDE3; cAMP-dependent 3',5'-cyclic phosphodiesterase 4D
- 1151 NEURONAL CALCIUM SENSOR 1 (NCS-1))
- 1152 mothers against DPP protein rat homolog 1 (MAD1)
- 1153 ADP-ribosylation factor 3 (ARF3)
- 1154 chymotrypsinogen B precursor (EC 3.4.21.1)
- 1155 granzyme M precursor (GZMM); MET-ASE; natural killer cell granular
- 1156 polypeptide, 53 kDa, growth factor induced
- 1157 proteasome component C8
- 1158 proteasome subunit C9
- 1159 Flk tyrosine-protein kinase; fps/fes-related
- 1160 chemokine receptor-like 1 (CMKLR1); G protein-coupled chemoattractant-
- 1161 calponin, acidic
- 1162 interferon induced protein
 - inositol polyphosphate 4-phosphatase type II alpha + inositol polyphosphate
- 1163 4-phosphatase type II-beta
- 1164 adenylyl cyclase type VI (ADCY6); ATP pyrophosphate-lyase; Ca(2+)-
NVP; neural visinin-like Ca2+-binding protein , VISININ-LIKE PROTEIN 1
- 1165 (VILIP-1) (NEURAL VISININ-LIKE PROTEIN 1) (NVL-1) (NVP-1) (21 KD
- 1166 mothers against DPP protein rat homolog 3 (MAD3); putative tumor
- 1167 ADP-ribosylation factor 4 (ARF4)
- 1168 elastase 2 precursor (EC 3.4.21.71)
- 1169 mast cell protease 1 precursor (RMCP-1)
- 1170 stromelysin 3; matrix metalloproteinase 11 (MMP11)
- 1171 proteasome subunit RC6-1
- 1172 tissue inhibitor of metalloproteinase-1 (TIMP-1)
- 1173 serine/threonine kinase receptor, type I
- 1174 G protein coupled receptor 1

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1175 cofilin

1176 Opposite gonadotropin-releasing hormone (GnRH)